

SEQUENCE LISTING



<110> Gudas, Jean M.  
Haak-Frendscho, Mary  
Foord, Orit  
Liang, Meina L.  
Ahluwalia, Kiran  
Bhakta, Sunil

<120> ANTIBODIES DIRECTED TO MONOCYTE  
CHEMO-ATTRACTANT PROTEIN-1 (MCP-1) AND USES THEREOF

<130> ABXAZ.001A

<140> 10/644,277  
<141> 2003-08-19

<150> 60/404,802  
<151> 2002-08-19

<160> 150

<170> FastSEQ for Windows Version 4.0

<210> 1  
<211> 1335  
<212> DNA  
<213> Homosapien

<400> 1

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tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaatg ggctttagt gatgggaggt tttgatctg aagatggtga gacaatctac 180  
gcacagaggt tccaggccag agtcgtcatg accgaggacc catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgag 300  
ttttggagtg gttattttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gggccctgtt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccgggtgac ggtgtcggtg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtccttaca gtcctcagga 540  
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600  
acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgc当地 660  
tggtgtcg agtgcaccgc gtcaccgc ccacccgtgg caggaccgtc agtcttcctc 720  
ttccccccaa aacccaagga caccctcatg atctcccgga cccctgaggt cacgtgcgtg 780  
gtgggtggacg tgagccacga agaccccgag gtccaggatca actggtagtgg ggacggcgtg 840  
gagggtgcata atgccaagac aaagccacgg gaggagcgt tcaacacgcac gttccgtgtg 900  
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgc当地 960  
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaaggggcag 1020  
ccccgagaac cacaggtgta caccctgccc ccatcccggtt aggagatgac caagaaccag 1080  
gtcagcctga cctgccttgtt caaaggcttc taccggcgtt acatcgccgtt ggagtggag 1140  
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgga ctccgacggc 1200  
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca gggaaacgtc 1260  
ttctcatgtt ccgtgatgca tgaggctgtt cacaaccactt acacgcagaa gagcctctcc 1320  
ctgtctccgg gtaaa 1335

<210> 2

<211> 445  
<212> PRT  
<213> Homosapien

<400> 2  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Asn Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Arg Phe  
50 55 60  
Gln Gly Arg Val Val Met Thr Glu Asp Pro Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
180 185 190  
Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
195 200 205  
Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
210 215 220  
Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
225 230 235 240  
Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
245 250 255  
Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
260 265 270  
Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
275 280 285  
Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
290 295 300  
Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
305 310 315 320  
Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
325 330 335  
Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
340 345 350  
Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
355 360 365  
Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
370 375 380  
Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
385 390 395 400  
Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
405 410 415

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Gly | Asn | Val | Phe | Ser | Cys | Ser | Val | Met | His | Glu | Ala | Leu | His | Asn |
| 420 |     |     |     |     |     |     |     | 425 |     |     |     |     |     | 430 |     |
| His | Tyr | Thr | Gln | Lys | Ser | Leu | Ser | Leu | Ser | Pro | Gly | Lys |     |     |     |
| 435 |     |     |     |     |     |     | 440 |     |     |     |     | 445 |     |     |     |

<210> 3  
<211> 660  
<212> DNA  
<213> Homosapien

<400> 3  
gacatcgtga tgacccagtc tccagactcc ctggctatgt ctctggcgaa gaggccacc 60  
atcaactgtta agtccagcca gagtgttta tacagctcca acaataagaa ctacttagtt 120  
tggtaccaggc agaaaccagg acagcctcct aaactgctca ttactgggc atctatccgg 180  
gaatccgggg tccctgaccg attcagttcc agcgggtctg agacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttttagtagt 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tcccgccatc tcatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
caatcgggta actcccaagga gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540  
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600  
gaagtcaccc atcagggcct gagctcgccc gtcacaaaaga gcttcaacag gggagagtgt 660

<210> 4  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 4  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Met Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Ser Gly Ser Glu Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Phe Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205

Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 5  
<211> 475  
<212> DNA  
<213> Homosapien

<400> 5  
caggtccagc tggtagcgtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgaatg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attattgtgc aaccaacgaa 300  
ttttggatgt gttattttga ctactgggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcccctgtcc caggagcac tacttcccc 420  
ggcgtgcaca cttcccaagg tggcctacag tcctcaggac tctactccct cagca 475

<210> 6  
<211> 158  
<212> PRT  
<213> Homosapien

<400> 6  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Thr Ser Pro Gly Val His Thr  
130 135 140  
Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
145 150 155

<210> 7  
<211> 477  
<212> DNA  
<213> Homosapien

<400> 7  
gacatcgta tgacccagtc tccagcctcc ctggctgagt ctctggcga gagggccacc 60  
atcaattgca agtccagcca gagtgttta tatacgcca acaataagaa ctacttagtt 120  
tggtaccagc agaaactagg acagccccct aagctgtca tttactggc atctacccgg 180  
gaatccgggg tccctgacc acctcaatggc agcgggtctg ggacagattt cacttcacc 240

atcagcagcc tgcaggctga agatgtggca gtttattact gtcaacaata ttatcgtagt 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 8  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 8  
Asp Ile Val Met Thr Gln Ser Pro Ala Ser Leu Ala Glu Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Arg Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala  
145 150 155

<210> 9  
<211> 556  
<212> PRT  
<213> Homosapien

<400> 9  
Cys Ala Gly Gly Thr Cys Cys Ala Gly Cys Thr Gly Gly Thr Ala Cys  
1 5 10 15  
Ala Gly Thr Cys Thr Gly Gly Gly Cys Thr Gly Ala Gly Gly Thr  
20 25 30  
Gly Ala Ala Gly Ala Ala Gly Cys Cys Thr Gly Gly Gly Cys Cys  
35 40 45  
Thr Cys Ala Gly Thr Gly Ala Ala Gly Gly Thr Cys Thr Cys Cys Thr  
50 55 60  
Gly Cys Ala Ala Gly Gly Thr Thr Cys Cys Gly Gly Ala Thr Ala  
65 70 75 80  
Cys Ala Cys Cys Cys Thr Cys Ala Cys Thr Gly Ala Ala Thr Thr Ala  
85 90 95  
Thr Cys Cys Ala Thr Gly Cys Ala Cys Thr Gly Gly Gly Thr Gly Cys  
100 105 110  
Gly Ala Cys Ala Gly Gly Cys Thr Cys Cys Thr Gly Gly Ala Ala Ala  
115 120 125  
Ala Gly Gly Gly Cys Thr Thr Gly Ala Gly Thr Gly Gly Ala Thr Gly  
130 135 140

Gly Gly Ala Gly Gly Thr Thr Thr Gly Ala Thr Cys Cys Thr Gly  
 145 150 155 160  
 Ala Ala Gly Ala Thr Gly Gly Thr Gly Ala Ala Ala Cys Ala Ala Thr  
 165 170 175  
 Cys Thr Ala Cys Gly Cys Ala Cys Ala Gly Ala Ala Gly Thr Thr Cys  
 180 185 190  
 Cys Ala Gly Gly Cys Ala Gly Ala Gly Thr Cys Ala Cys Cys Ala  
 195 200 205  
 Thr Gly Ala Cys Cys Gly Ala Gly Gly Ala Cys Ala Cys Ala Thr Cys  
 210 215 220  
 Thr Ala Cys Ala Gly Ala Cys Ala Gly Cys Cys Thr Ala Cys  
 225 230 235 240  
 Ala Thr Gly Ala Gly Cys Thr Gly Ala Gly Cys Ala Gly Cys Cys  
 245 250 255  
 Thr Gly Ala Gly Ala Thr Cys Thr Gly Ala Gly Gly Ala Cys Ala Cys  
 260 265 270  
 Gly Gly Cys Cys Gly Thr Gly Thr Ala Thr Ala Cys Thr Gly Thr  
 275 280 285  
 Gly Cys Ala Ala Cys Ala Ala Cys Gly Ala Thr Thr Thr Thr Thr  
 290 295 300  
 Gly Gly Ala Gly Thr Gly Gly Thr Ala Thr Thr Ala Thr Ala Ala  
 305 310 315 320  
 Cys Thr Ala Cys Thr Gly Gly Gly Cys Cys Ala Gly Gly Ala  
 325 330 335  
 Ala Cys Cys Cys Thr Gly Gly Thr Cys Ala Cys Cys Gly Thr Cys Thr  
 340 345 350  
 Cys Cys Thr Cys Ala Gly Cys Cys Thr Cys Cys Ala Cys Cys Ala Ala  
 355 360 365  
 Gly Gly Gly Cys Cys Ala Thr Cys Gly Gly Thr Cys Thr Thr Cys  
 370 375 380  
 Cys Cys Cys Cys Thr Gly Gly Cys Cys Cys Cys Thr Gly Cys Thr  
 385 390 395 400  
 Cys Cys Ala Gly Ala Gly Cys Ala Cys Cys Thr Cys Cys Gly Ala  
 405 410 415  
 Gly Ala Gly Cys Ala Cys Ala Gly Cys Gly Gly Cys Cys Cys Thr Gly  
 420 425 430  
 Gly Gly Cys Thr Gly Cys Cys Thr Gly Gly Thr Cys Ala Ala Gly Gly  
 435 440 445  
 Ala Cys Thr Ala Cys Thr Thr Cys Cys Cys Gly Ala Ala Cys Cys  
 450 455 460  
 Gly Gly Thr Gly Ala Cys Gly Gly Thr Gly Thr Cys Gly Thr Gly Gly  
 465 470 475 480  
 Ala Ala Cys Thr Cys Ala Gly Gly Cys Gly Cys Thr Cys Thr Gly Ala  
 485 490 495  
 Cys Cys Ala Gly Cys Gly Gly Cys Gly Thr Gly Cys Ala Cys Ala Cys  
 500 505 510  
 Cys Thr Thr Cys Cys Cys Ala Gly Cys Thr Gly Thr Cys Cys Thr Ala  
 515 520 525  
 Cys Ala Gly Thr Cys Cys Thr Cys Ala Gly Gly Ala Cys Thr Cys Thr  
 530 535 540  
 Ala Cys Thr Cys Cys Cys Thr Cys Ala Gly Cys Ala  
 545 550 555

<210> 10

<211> 185

<212> PRT

<213> Homosapien

<400> 10  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Tyr Asn Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 11

<211> 490

<212> DNA

<213> Homosapien

<400> 11  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gaggcccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acaaataagaa ctacttagtt 120  
tggtaccaac agaaaccagg acagcctcct aaactgctca tttaactgggc atctatccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cacttcacc 240  
atcaacagcc tgcaggctga agatgtggca gtttattact gtcagcagta tttttatagt 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tcccccaatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgaa taacccctc 480  
caatcggtta 490

<210> 12

<211> 163

<212> PRT

<213> Homosapien

<400> 12  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45

Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Asn Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly

<210> 13  
 <211> 543  
 <212> DNA  
 <213> Homosapien

<400> 13  
 cagggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggaca caccctact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatgtga aacaatctac 180  
 gcacagaagt tccaggacag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctaag atctgaggac acggccgtgt attactgtgc aaccaacgat 300  
 ttttggagtg gttatgttga ctgctggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
 tccacccaagg gcccattcggt ctccccctg ggcgcctgct ccaggagcac ctccgagagc 420  
 acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtcgtgg 480  
 aactcaggcg ctctgaccag cggcgtgcac accttccccag ctgtcctaca gtcctcagga 540  
 ctt 543

<210> 14  
 <211> 181  
 <212> PRT  
 <213> Homosapien

<400> 14  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly His Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Asp Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu |
| 130 |     |     |     |     | 135 |     |     |     |     | 140 |     |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
| 145 |     |     |     |     | 150 |     |     |     |     | 155 |     |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     |     | 165 |     |     |     | 170 |     |     |     |     | 175 |     |
| Gln | Ser | Ser | Gly | Leu |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     | 180 |     |     |     |     |     |     |     |     |     |     |

<210> 15  
 <211> 490  
 <212> DNA  
 <213> Homosapien

<400> 15  
 gacatcgtgc tgacccagtc tccagactcc ctggctgtgt gtctggcgaa gagggccacc 60  
 atcaactgca agtccagcca gagtgttta tatagtccca acaataagaa cttcttagtt 120  
 tggtaccaggc agagaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180  
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt 300  
 ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaaggtgga taacccctc 480  
 caatcggta 490

<210> 16  
 <211> 163  
 <212> PRT  
 <213> Homosapien

<400> 16  
 Asp Ile Val Leu Thr Gln Ser Pro Asp Ser Leu Ala Val Cys Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Pro Asn Asn Lys Asn Phe Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly

<210> 17

<211> 1335  
<212> DNA  
<213> Homosapien

<400> 17

cagggtccagc tggtagcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatggggaggt tttgatctg aagatggta aacaatctac 180  
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagtctac 240  
atggagctga gcagcctgag atctgaggac acggccatgt attactgtgc aacacgggag 300  
ttttggactg gttatttga ccactgggc caggaaacc tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccatcggt ctccccctg gcccctgtc ccaggagcac ctccgagagc 420  
acagcggccc tgggctgct ggtcaaggac tacttcccc aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600  
acctgcaacg tagatcacaa gcccagcaac accaagggtg acaagacagt tgagcgc当地 660  
tgttgtgtcg agtgcaccgc gtcaccaggca ccacctgtgg caggaccgtc agtcttcctc 720  
ttccccccaa aacccaagga caccctcatg atctcccgaa cccctgaggt cacgtgcgtg 780  
gtggggacg tgagccacga agaccccgag gtccagttca actggtaacgt ggacggcgtg 840  
gagggtgcata atgccaagac aaagccacgg gaggagcagt tcaacacgac gttccgtgtg 900  
gtcagcgtcc tcaccgttgt gcaccaggac tggctgaacg gcaaggagta caagtgc当地 960  
gtctccaaca aaggcctccc agccccatc gagaaaacca tctccaaaac caaaggggcag 1020  
ccccgagaac cacaggtgta caccctgccc ccattccggg aggagatgac caagaaccag 1080  
gtcagcctga cctgccttgtt caaaggcttc taccctcagcg acatgcgcgt ggagtggag 1140  
agcaatgggc agccggagaa caactacaag accacacctc ccattgtggc ctccgacggc 1200  
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260  
ttctcatgtc ccgtgatgca tgaggctctg cacaaccact acacgc当地 gggctctcc 1320  
ctgtctccgg gtaaa 1335

<210> 18  
<211> 445  
<212> PRT  
<213> Homosapien

<400> 18

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Thr Arg Glu Phe Trp Thr Gly Tyr Phe Asp His Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175

Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Val Pro Ser  
 180 185 190  
 Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
 210 215 220  
 Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
 225 230 235 240  
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
 245 250 255  
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
 260 265 270  
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
 275 280 285  
 Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
 290 295 300  
 Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
 305 310 315 320  
 Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
 325 330 335  
 Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
 340 345 350  
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
 355 360 365  
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
 370 375 380  
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
 385 390 395 400  
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
 405 410 415  
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn  
 420 425 430  
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 435 440 445

<210> 19  
 <211> 660  
 <212> DNA  
 <213> Homosapien

<400> 19  
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
 atcaactgca agtccagcca gagtgttta tacagctcca acaataagaa ctacttagtt 120  
 tggtatcagc agaaaccagg acagcctcct aaactgctca ttactgggc atctatccgg 180  
 gaatccgggg tcccggaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtact 300  
 ccgctcaatt tcggcggagg gaccaaggtg gagatcaaac gaactgtggc tgcaccatct 360  
 gtcttcatct tcccggccatc tcatgtggc ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtggta taacgccctc 480  
 caatcgggta actcccgagga gagtgcacaa gagcaggaca gcaaggacag cacctacagc 540  
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacgcctgc 600  
 gaagtccaccc atcaggccct gagctcgccc gtcacaaaaga gttcaacag gggagagtgt 660

<210> 20  
 <211> 220

<212> PRT  
<213> Homosapien

<400> 20  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Thr Pro Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205  
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 21  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 21  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata cactttact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aagatggtga aacaagctac 180  
gcacagaagt tccggggcag agtcaccatg accgaggaca catctacaga cacagccac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgtat 300  
ttttggagtg gttattttga ctattggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt cttccccctg gcccctgtt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctt 543

<210> 22  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 22

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Phe Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ser Tyr Ala Gln Lys Phe  
 50 55 60  
 Arg Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala His  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu  
 180

<210> 23  
 <211> 460  
 <212> DNA  
 <213> Homosapien

<400> 23  
 gacatccaga tgacccagtc tccatcttcc gtgtctgcat ctgtaggaga cagagtcacc 60  
 atcaactgtc gggcgagtc gggattgac atctacttag cctggtatca gcagaaacca 120  
 gggaaagccc ctaagctcct gatcaatgct gcatccagtt tgcaaaaacgg ggtccctca 180  
 aggttcggcg gcagtggatc tgggacagat ttcactctca ccatcagcgg cctgcagcct 240  
 gaagattttg caacttacta ttgtcaactg acttacttt tcccgtggac gttcgccaa 300  
 gggaccaagg tggaaatcaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360  
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420  
 cccagagagg ccaaagtaca gtgaaaggtg gataacgccc 460

<210> 24  
 <211> 153  
 <212> PRT  
 <213> Homosapien

<400> 24  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Val Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Asp Ile Tyr  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Asn Ala Ala Ser Ser Leu Gln Asn Gly Val Pro Ser Arg Phe Gly Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Gly Leu Gln Pro  
 65 70 75 80

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Asp | Phe | Ala | Thr | Tyr | Tyr | Cys | Gln | Leu | Thr | Tyr | Phe | Phe | Pro | Trp |
|     |     |     |     | 85  |     |     |     |     | 90  |     |     |     |     | 95  |     |
| Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile | Lys | Arg | Thr | Val | Ala | Ala |
|     |     |     |     | 100 |     |     |     | 105 |     |     | 110 |     |     |     |     |
| Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp | Glu | Gln | Leu | Lys | Ser | Gly |
|     |     |     |     | 115 |     |     |     | 120 |     |     | 125 |     |     |     |     |
| Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn | Phe | Tyr | Pro | Arg | Glu | Ala |
|     |     |     |     | 130 |     |     |     | 135 |     |     | 140 |     |     |     |     |
| Lys | Val | Gln | Trp | Lys | Val | Asp | Asn | Ala |     |     |     |     |     |     |     |
|     |     |     |     | 145 |     |     |     | 150 |     |     |     |     |     |     |     |

<210> 25  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 25  
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt gcgacgaaatt 120  
cctggaaaag ggcttgagtg gatgggaggt tttgaccctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaaacat 300  
ttttggagtg gctattgggg ccactggggc cagggAACCC tggcacccgt ctcctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcgcctgtt ccaggagcac ctccgagagc 420  
acagcggccc tggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccaag ctgtcctaca gtcctcagga 540  
ctt

<210> 26  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 26  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Arg Ile Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Trp Gly His Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175

Gln Ser Ser Gly Leu  
180

<210> 27  
<211> 459  
<212> DNA  
<213> Homosapien

<400> 27  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gaggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acaataagaa ctacctagct 120  
tggtaccaag ctgctcattt actggacata tatccggaa tccgggtcc ctgaccgatt 180  
cagtggcagc gggctggaa cagatttac tctcaccatc agcagcctgc aggctgaaga 240  
tgtggcagtt tattactgtc aggaacatta tagtattccg tggacgttcc gccaaggac 300  
caaggtggaa atcaaacgaa ctgtggctgc accatctgtc ttcatcttcc cgccatctga 360  
tgagcagttt aactgcctct gttgtgtgcc tgctgaataa cttctatccc agagaggcca 420  
aagtacagtg gaaggtggat aacgcctcc aatcggtt 459

<210> 28  
<211> 149  
<212> PRT  
<213> Homosapien

<400> 28  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Ala Trp Tyr Leu Leu Ile Tyr Trp Thr  
35 40 45  
Tyr Ile Arg Glu Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser  
50 55 60  
Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val  
65 70 75 80  
Ala Val Tyr Tyr Cys Gln Glu His Tyr Ser Ile Pro Trp Thr Phe Gly  
85 90 95  
Gln Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala Pro Ser Val  
100 105 110  
Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Asn Cys Leu Cys Cys Val  
115 120 125  
Pro Ala Glu Leu Leu Ser Gln Arg Gly Gln Ser Thr Val Glu Gly Gly  
130 135 140  
Arg Pro Pro Ile Gly  
145

<210> 29  
<211> 524  
<212> DNA  
<213> Homosapien

<400> 29  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggct 60  
tcctgcaagg ttccggata caccctactt gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagt gatgggaggt tttgatcctg aagatgtga aacaatctac 180  
gcacagaagt tccaggccag agtcaccatc accgaggaca catctacaga cacggcctac 240

atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgat 300  
ttttggagtg gttatttga ctgtctggac cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gccccatcggt ctccccctg gccccctgct ccaggaacac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgt 524

<210> 30  
<211> 174  
<212> PRT  
<213> Homosapien

<400> 30  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Cys Trp Asp Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Asn Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala  
165 170

<210> 31  
<211> 490  
<212> DNA  
<213> Homosapien

<400> 31  
gacatcgtga tgacccagtc tccagactcc ctggctgcgt ctctgggcga gaggcccacc 60  
atcaactgca agtccagtc gagtgttta tacaggtcca acaataagaa ttatttagtt 120  
tggtaccagc aaaaaccagg acagcctcct aagctgctca ttactgggc atctatccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttatttct gtcagcaata ttatagttct 300  
ccgtggacgt ttggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taaccccctc 480  
caatcgggta 490

<210> 32  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 32  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Ala Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Phe Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
 145 150 155 160  
 Gln Ser Gly

<210> 33  
 <211> 545  
 <212> DNA  
 <213> Homosapien

<400> 33  
 caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggata cacccctact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatggggaggt tttgatctg aagatggtga aacaatctac 180  
 gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacctggtat 300  
 agtggatct acttagctt tgatatctgg ggccaaggga caatggtcac cgtctttca 360  
 gcctccacca agggcccatc ggtttcccc ctggcgcctc gctccaggag cacctccgag 420  
 agcacagcgg ccctgggctg cctggtcaag gactactcc cccaaccggg gacggtgtcg 480  
 tggaactcag gcgctctgac cagcggcgtg cacaccttc cagctgtcct acagtccctca 540  
 ggatt 545

<210> 34  
 <211> 181  
 <212> PRT  
 <213> Homosapien

<400> 34  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 65  | 70  | 75  | 80  |     |     |     |     |     |     |     |     |     |     |     |     |
| Met | Glu | Leu | Ser | Ser | Leu | Arg | Ser | Glu | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 85  |     |     |     |     |     |     |     | 90  |     |     |     |     |     |     | 95  |
| Ala | Thr | Trp | Tyr | Ser | Gly | Ile | Tyr | Leu | Ala | Phe | Asp | Ile | Trp | Gly | Gln |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 100 |     |     |     |     |     |     |     | 105 |     |     |     |     |     |     | 110 |
| Gly | Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 115 |     |     |     |     |     |     |     | 120 |     |     |     |     |     |     | 125 |
| Phe | Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 130 |     |     |     |     |     |     |     | 135 |     |     |     |     |     |     | 140 |
| Leu | Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 145 |     |     |     |     |     |     |     | 150 |     |     |     |     |     |     | 160 |
| Trp | Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 165 |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 175 |
| Leu | Gln | Ser | Ser | Gly |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 180 |

<210> 35  
<211> 472  
<212> DNA  
<213> Homosapien

<400> 35  
gaaattgtgc tgactcagtc tccagacttt cagtcgtgtca ctccaaaggg gaaagtcacc 60  
atcacctgcc gggccagtc gggcattggt agtagcttac actggatccca gcagaaacca 120  
gatcagtctc caaagcttccat catcaagttat gcttccctgt ccttctcagg ggtcccttcg 180  
aggttcagtg gcagtggtatc tgggacatgtt ttcaccctca ccatcaatag cctgaaagct 240  
gaagatgtcg caacgttattt ctgtcatcag agtagtagtt tacctcacac tttcgccgga 300  
gggaccaagg tggagatcaa acgaaactgtg gctgcaccat ctgtcttcat cttcccgcca 360  
tctgtatgagc agttgaaatc tggaaactgtc tctgttgtgt gctgtgtgaa taacttctat 420  
cccaagagagg ccaaagtaca gtggaaaggtg gataaccccc tccaatcggt ta 472

<210> 36  
<211> 157  
<212> PRT  
<213> Homosapien

<400> 36  
Glu Ile Val Leu Thr Gln Ser Pro Asp Phe Gln Ser Val Thr Pro Lys  
1 5 10 15  
Glu Lys Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Ser  
20 25 30  
Leu His Trp Tyr Gln Gln Lys Pro Asp Gln Ser Pro Lys Leu Leu Ile  
35 40 45  
Lys Tyr Ala Ser Gln Ser Phe Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Asn Ser Leu Glu Ala  
65 70 75 80  
Glu Asp Ala Ala Thr Tyr Tyr Cys His Gln Ser Ser Ser Leu Pro His  
85 90 95  
Thr Phe Gly Gly Thr Lys Val Glu Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly

145

150

155

<210> 37  
<211> 1335  
<212> DNA  
<213> Homosapien

<400> 37  
caggtccagt tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggctttagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccaggcag agtcagttatg accgaggaca catccacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aaccaacgaa 300  
ttttggatgt gttatgttgc ctactggggc cagggAACCC tggtcaccgt ctccctagcc 360  
tccaccaagg gcccattcgtt ctccccctg gcgcctgtgt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtccctaca gtcctcagga 540  
ctctactccc tcagcagcgt ggtgaccgtg ccctccagca acttcggcac ccagacctac 600  
acctgcaacg tagatcacaa gcccagcaac accaagggtgg acaagacagt tgagcgcaaa 660  
tggtgtgtcg agtgcaccgcgtt gtcaccgcgtt ccacccgtgg caggaccgtc agtcttcctc 720  
ttccccccaa aacccaaagga caccctcatg atctcccgaa cccctgaggt cacgtgcgtg 780  
gtgggtggacg tgagccacga agaccccgag gtccaggatca actggtagtgg 840  
gaggtgcata atgccaagac aaagccacgg gaggaggact tcaacagcac gttccgtgtg 900  
gtcagcgtcc tcaccgtgtt gcaccaggac tggctgaacg gcaaggagta caagtgcag 960  
gtctccaaca aaggcctccc agcccccata gaaaaacca tctccaaaac caaaggccag 1020  
ccccgagaac cacaggtgta caccctgccc ccatcccgaa aggagatgac caagaaccag 1080  
gtcagcctga cctgcctgtt caaaggcttc tacccaggcg acatgcgcgt ggagtggag 1140  
agcaatgggc agccggagaa caactacaag accacacctc ccatgctgaa ctccgacggc 1200  
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc 1260  
ttctcatgtt ccgtgatgca tgaggctgtt cacaaccact acacgcagaa gggctctcc 1320  
ctgtctccgg gtaaa 1335

<210> 38  
<211> 445  
<212> PRT  
<213> Homosapien

<400> 38  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Ser Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
85 90 95  
Ala Thr Asn Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140

Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
 145 150 155 160  
 Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
 165 170 175  
 Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro Ser  
 180 185 190  
 Ser Asn Phe Gly Thr Gln Thr Tyr Cys Asn Val Asp His Lys Pro  
 195 200 205  
 Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu  
 210 215 220  
 Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu  
 225 230 235 240  
 Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu  
 245 250 255  
 Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln  
 260 265 270  
 Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys  
 275 280 285  
 Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu  
 290 295 300  
 Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys  
 305 310 315 320  
 Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys  
 325 330 335  
 Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser  
 340 345 350  
 Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys  
 355 360 365  
 Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln  
 370 375 380  
 Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly  
 385 390 395 400  
 Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln  
 405 410 415  
 Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn  
 420 425 430  
 His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys  
 435 440 445

<210> 39  
 <211> 660  
 <212> DNA  
 <213> Homosapien

<400> 39  
 gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
 atcaactgca agtccagcca gagtgttta tacagctcca acaataagaaa ctatttagtt 120  
 tggtaccagc agagaccagg acagcctcct aagctgctca tttactggc atctacccgg 180  
 gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cacttcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata tttttattct 300  
 ccgtggacgt tcggccaagg gaccaaggta gaaatcaaac gaactgtggc tgcaccatct 360  
 gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
 caatcgggta actcccagga gagtgtcaca gaggcaggaca gcaaggacag cacctacagc 540  
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacgcctgc 600  
 gaagtcaacc atcaggccct gagctcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 40  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 40  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Arg Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Phe Tyr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205  
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 41  
<211> 556  
<212> DNA  
<213> Homosapien

<400> 41  
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggaca cattttcaact gaattatcca tacactgggt gcgacaggct 120  
cctggaaaag ggctcgagtg gatggggaggt tttgatcctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgtat 300  
ttttggagtg gttatttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gccccatcggt cttccccctg gccccctgtt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctctactccc tcagca 556

<210> 42  
<211> 185

<212> PRT  
<213> Homosapien

<400> 42  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly His Ile Phe Thr Glu Leu  
20 25 30  
Ser Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 43  
<211> 490  
<212> DNA  
<213> Homosapien

<400> 43  
gacatcgtga tgacccagtc tccaggctcc ctggctgtgt ctctggcgag gaggccacc 60  
atcaactgca agtccagcca gagtatttta ttcaggtcca acaaataagaa ctatttaact 120  
tggtaccagc agaaaaccagg acaggctcct aaactgctca ttactgggc atctatccgg 180  
gaatccgggg tccctgatcg attcagtggc agcgggtctg ggtcaaattt cactctcacc 240  
atcaccagcc tgcaggctga agatgtggca atttattact gtcagcaata ttatagtagt 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
caatcggtta 490

<210> 44  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 44  
Asp Ile Val Met Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Phe Arg  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ile Arg Glu Ser Gly Val |     |     |
| 50  | 55  | 60  |
| Pro Asp Arg Phe Ser Gly Ser Gly Ser Asn Phe Thr Leu Thr         |     |     |
| 65  | 70  | 75  |
| Ile Thr Ser Leu Gln Ala Glu Asp Val Ala Ile Tyr Tyr Cys Gln Gln |     |     |
| 85  | 90  | 95  |
| Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile |     |     |
| 100   | 105 | 110 |
| Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp |     |     |
| 115   | 120 | 125 |
| Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn |     |     |
| 130   | 135 | 140 |
| Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu |     |     |
| 145   | 150 | 155 |
| Gln Ser Gly   |     | 160 |

<210> 45  
 <211> 559  
 <212> DNA  
 <213> Homosapien

<400> 45  
 caggtccagc tggtagcgtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120  
 cctggaaaag ggcttggatg gatggggaggt tttgatccctg aagatggtga aacaatcaac 180  
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacaggtac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcct 300  
 ggtggatata gtggctactt tgaccactgg ggccaggaa ccctggtcac cgtctccctca 360  
 gcctccacca agggcccatc ggtttccccc ctggcgccct gctccaggag cacctccgag 420  
 agcacacgccc ccctgggctg cctggtaag gactacttcc ccgaaccgggt gacgggtgtcg 480  
 tggaacttag ggcgtctgac cagcggcgtg cacaccttcc cagctgtcct acagtccctca 540  
 ggactctact ccctcagca 559

<210> 46  
 <211> 186  
 <212> PRT  
 <213> Homosapien

<400> 46  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Asn Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Gly Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Pro Gly Gly Tyr Ser Gly Tyr Phe Asp His Trp Gly Gln  
 100 105 110  
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala |     |     |
| 130   | 135 | 140 |
| Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser |     |     |
| 145   | 150 | 155 |
| Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val |     |     |
| 165   | 170 | 175 |
| Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser                         |     |     |
| 180   | 185 |     |

<210> 47  
 <211> 464  
 <212> DNA  
 <213> Homosapien

<400> 47  
 gacatcgtga tgacccagtc tccagatttc ctggctgtgt ctctggcgaa gaggcccacc 60  
 atcaactgca agtccagcca gagtgtttt tacagctcca acaataagaa ctacttagtt 120  
 tggtaccaggc agaaaccggc acagcctccct aagctgctcc tttactggc atctaccgg 180  
 gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cacttcacc 240  
 atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttct 300  
 ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360  
 gtcttcatct tcccgccatc tgatgagcag ttgaaatctg gaaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaa 464

<210> 48  
 <211> 154  
 <212> PRT  
 <213> Homosapien

<400> 48  
 Asp Ile Val Met Thr Gln Ser Pro Asp Phe Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Pro Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Phe Tyr Ser  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
 130 135 140  
 Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp  
 145 150

<210> 49  
 <211> 476  
 <212> DNA

<213> Homosapien

<400> 49

caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggctttagtg gatggggaggt tttgatctg aagatgtga aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaca cacagcctac 240  
atggaaactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacacacgat 300  
ttttggagtg cttatTTTA ctactggggc cagggAACCC tggcacccgt ctcctcagct 360  
tccaccaagg gcccattcgt cttccccctg gcgcctgtct ccaggagcac ctccgagagc 420  
acagccgccc tggctgcct ggtcaaggac tacttccccg aaccggtgac ggtgtc 476

<210> 50

<211> 158

<212> PRT

<213> Homosapien

<400> 50

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr His Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr His Asp Phe Trp Ser Ala Tyr Phe Tyr Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val  
145 150 155

<210> 51

<211> 490

<212> DNA

<213> Homosapien

<400> 51

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
atcaactgca agtccagcca gagtgtttta tacggctcca acaataagag ctacttagct 120  
tggtaccagc agaaaccagg acagcctcct aagctgctca tttactgggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctgc agatgtggca gtttattact gtcagcaaca ttatagtact 300  
ccgtgcagtt ttggccaggg gaccaaactg gagatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tggtgtgc 420  
ctgtgtataatacttcc cagagaggcc aaagtacagt ggaagggtgga taacgccctc 480  
caatcgggta 490

<210> 52

<211> 163  
<212> PRT  
<213> Homosapien

<400> 52  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Gly  
20 25 30  
Ser Asn Asn Lys Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Ala Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
His Tyr Ser Thr Pro Cys Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly

<210> 53  
<211> 550  
<212> DNA  
<213> Homosapien

<400> 53  
caggtgcagc tgggtgcagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgtcaagg cttctggata cacccttcacc ggctactatc tgcaactgggt ggcacaggcc 120  
cctggacaag ggcttgagtg gatgggatgg atcaaccctt acaatgtatgg cacaactat 180  
gcacagaagt ttcaggccag ggtcaccatg accaggacca cgtccatca gacaggctac 240  
atggagctga gcaggctgag atctgacgac acggccgtt attactgtgc gagagatata 300  
gccgcagctg gagccgtcta ctttgactac tggggccagg gaaccctggt caccgtctcc 360  
tcagcttcca ccaaggcccc atccgtcttc cccctggcgc cctgctccag gagcacctcc 420  
gagagcacag ccgccttggg ctgcctggc aaggactact ttccccgaac cggtgacggt 480  
gtcgttggaaac tcaggcgcccc tgaccagcgg cgtgcacacc ttcccggctg tcctacagtc 540  
ctcaggactt 550

<210> 54  
<211> 183  
<212> PRT  
<213> Homosapien

<400> 54  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Gly Tyr  
20 25 30  
Tyr Leu His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu Trp Met

|   |     |     |
|---|-----|-----|
| 35  | 40  | 45  |
| Gly Trp Ile Asn Pro Tyr Asn Asp Gly Thr Asn Tyr Ala Gln Lys Phe |     |     |
| 50  | 55  | 60  |
| Gln Gly Arg Val Thr Met Thr Arg Asp Thr Ser Ile Ser Thr Ala Tyr |     |     |
| 65  | 70  | 75  |
| Met Glu Leu Ser Arg Leu Arg Ser Asp Asp Thr Ala Val Tyr Tyr Cys |     |     |
| 85  | 90  | 95  |
| Ala Arg Asp Ile Ala Ala Gly Ala Val Tyr Phe Asp Tyr Trp Gly     |     |     |
| 100   | 105 | 110 |
| Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser |     |     |
| 115   | 120 | 125 |
| Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala |     |     |
| 130   | 135 | 140 |
| Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Arg Thr Gly Asp Gly |     |     |
| 145   | 150 | 155 |
| Val Val Glu Leu Arg Arg Pro Asp Gln Arg Arg Ala His Leu Pro Gly |     |     |
| 165   | 170 | 175 |
| Cys Pro Thr Val Leu Arg Thr                                     |     |     |
| 180   |     |     |

<210> 55  
 <211> 458  
 <212> DNA  
 <213> Homosapien

<400> 55  
 gacatccaga tgacccagtc tccatccctcc ctgtctgcat ctgttaggaga cagagtcacc 60  
 atcaacttgcc aggcgagtca ggacattacc acctatttaa attggtatca gcagaaaccca 120  
 gggaaagccc ctaagctccct gatctacgat gcatccaatt tggaaacagg ggtcccatca 180  
 aggttcagtg gaagtggatc tggacagat tttactttca ccatcagcag cctgcagcct 240  
 gaagatattt caacatatta ctgtcaacaa tatgataatc tcccgatcac cttcggccaa 300  
 gggacacgac tggagattaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360  
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420  
 cccagagagg ccaaagtaca gggaaagggtgg ataacgcc 458

<210> 56  
 <211> 152  
 <212> PRT  
 <213> Homosapien

<400> 56  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Thr Thr Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Gln Tyr Asp Asn Leu Pro Ile  
 85 90 95  
 Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg Thr Val Ala Ala  
 100 105 110  
 Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala |     |     |
| 130   | 135 | 140 |
| Lys Val Gln Gly Arg Trp Ile Thr                                 |     |     |
| 145   | 150 |     |

<210> 57  
 <211> 571  
 <212> DNA  
 <213> Homosapien

<400> 57  
 caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg tttccggata caccctact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggtga aacaatctac 180  
 gcacagaagt tccaggccag agtcatgtat accgaggaca catctacaga cacagccttc 240  
 atggacactga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgtat 300  
 atgtgaccc ctcactacact ctacttcgtt atggacgtct ggggccaagg gaccacggtc 360  
 accgtctcct cagcttccac caagggccca tccgtttcc ccttggcgcc ctgctccagg 420  
 agcacctccg agagcacagc cgcctgggc tgcctggta aggactactt ccccgaaaccg 480  
 gtgacgggtgt cgtggaaactc aggccctgtt accagcggcg tgcacacctt cccggctgtc 540  
 ctacagtctt caggactcta ctccctcagc a 571

<210> 58  
 <211> 190  
 <212> PRT  
 <213> Homosapien

<400> 58  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Met Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe  
 65 70 75 80  
 Met Asp Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Asp Met Leu Thr Pro His Tyr Leu Tyr Phe Gly Met Asp  
 100 105 110  
 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys  
 115 120 125  
 Gly Pro Ser Val Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu  
 130 135 140  
 Ser Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro  
 145 150 155 160  
 Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr  
 165 170 175  
 Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
 180 185 190

<210> 59

<211> 458  
<212> DNA  
<213> Homosapien

<400> 59  
gacatccaga tgacccagtc tccatcctcc ctgtctgcat ctgttaggaga cagagtcacc 60  
atcaattgc gggcaagtca gggcattaga aatgattag gctggtatca gcagaaacca 120  
gggaaagccc ctaagcgcct gatctatgct acatccagtt tgcaaagtgg ggtcccatca 180  
aggttcagcg gcagtggtac tggacagaa ttcaacttca caatcagcag cctgcagcct 240  
gaagattttg caacttatta ctgtctacag cataatactt acccattcac tttcggccct 300  
gggaccaaag tggatataaa acgaactgtg gctgcaccat ctgtcttcat cttccgcca 360  
tctgtatgac agttgaaatc tggaaactgtc tctgttgtt gctgtgtgaa taacttctat 420  
cccagagagg ccaaagtaca gtggaaaggta gataacgc 458

<210> 60  
<211> 152  
<212> PRT  
<213> Homosapien

<400> 60  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
35 40 45  
Tyr Ala Thr Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Thr Tyr Pro Phe  
85 90 95  
Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg Thr Val Ala Ala  
100 105 110  
Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly  
115 120 125  
Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala  
130 135 140  
Lys Val Gln Trp Lys Val Asp Asn  
145 150

<210> 61  
<211> 1338  
<212> DNA  
<213> Homosapien

<400> 61  
caggtgcagc tgcaggagtc gggcccagga ctggtaaagc cttcacagac cctgtccctc 60  
acctgcactg tctcagggtgg ctccatcagc aatgtgggtt actactggaa ctggatccgc 120  
cagcacccag ggaaggccct ggagtggatt gggtacatct attacagtgg aaacacctac 180  
tacaacccgt ccctcaagag tcgaattacc atatcaatag acacgtctaa gaaccagttc 240  
tccctgaccc tgagctctgt gactgcccg gacacggccg tggattactg tgcgagagat 300  
ggtggagacg atgctttga tatctggggc caagggacaa tggtcaccgt ctcttcagct 360  
tccaccaagg gcccattccgt ctccccctg gcccctgct ccaggagcac ctccgagagc 420  
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ccctgaccag cggcgtgcac accttcccgg ctgtccttaca gtcctcaggaa 540

ctctactccc tcagcagcgt ggtgaccgtg ccctccagca gcttggcac gaagacctac 600  
 acctgcaacg tagatcacaa gcccagcaac accaaggtagg acaagagagt tgagtccaaa 660  
 tatggtcccc catgcccattc atgcccagca cctgagttcc tggggggacc atcagtcttc 720  
 ctgttccccca caaaaacccaa ggacactctc atgatctccc ggacccctga ggtcacgtgc 780  
 gtgttgtgg acgtgagcca ggaagacccc gaggtccagt tcaactggta cgtggatggc 840  
 gtggaggtgc ataatgcca gacaaagccg cgggagggc agttcaacag cacgtaccgt 900  
 gtggtcagcg tcctcacccgt cctgcaccag gactggctga acggcaagga gtacaagtgc 960  
 aaggtctcca acaaaggccct cccgtctcc atcgagaaaa ccacatccaa agccaaagg 1020  
 cagccccgag agccacaggt gtacaccctg ccccccattcc aggaggagat gaccaagaac 1080  
 caggtcagcc tgacctgcct ggtcaaaggc ttctacccca ggcacatcgc cgtggagtgg 1140  
 gagagcaatg ggcagccgga gaacaactac aagaccacgc ctccctgtgc ggactccgac 1200  
 ggctccttct tcctctacag caggctaacc gtggacaaga gcaggtggca ggagggaaat 1260  
 gtctctcat gctccgtgat gcatgaggct ctgcacaacc actacacacaca gaagagcctc 1320  
 tccctgtctc tggtaaa 1338

<210> 62  
 <211> 446  
 <212> PRT  
 <213> Homosapien

<400> 62

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Leu | Gln | Glu | Ser | Gly | Pro | Gly | Leu | Val | Lys | Pro | Ser | Gln |
| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 5   |     |     |     |     |     |     | 10  |     |     |     | 15  |     |     |     |
| Thr | Leu | Ser | Leu | Thr | Cys | Thr | Val | Ser | Gly | Gly | Ser | Ile | Ser | Ser | Gly |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 20  |     |     |     |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Gly | Asn | Tyr | Trp | Asn | Trp | Ile | Arg | Gln | His | Pro | Gly | Lys | Gly | Leu | Glu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 35  |     |     |     |     |     | 40  |     |     |     | 45  |     |     |     |     |
| Trp | Ile | Gly | Tyr | Ile | Tyr | Tyr | Ser | Gly | Asn | Thr | Tyr | Tyr | Asn | Pro | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 50  |     |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |
| Leu | Lys | Ser | Arg | Ile | Thr | Ile | Ser | Ile | Asp | Thr | Ser | Lys | Asn | Gln | Phe |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 65  |     |     |     |     |     | 70  |     |     |     | 75  |     |     |     | 80  |
| Ser | Leu | Thr | Leu | Ser | Ser | Val | Thr | Ala | Ala | Asp | Thr | Ala | Val | Tyr | Tyr |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 85  |     |     |     |     |     |     | 90  |     |     |     | 95  |     |     |     |
| Cys | Ala | Arg | Asp | Gly | Gly | Asp | Asp | Ala | Phe | Asp | Ile | Trp | Gly | Gln | Gly |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 100 |     |     |     |     |     | 105 |     |     |     | 110 |     |     |     |     |
| Thr | Met | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 115 |     |     |     |     |     | 120 |     |     |     | 125 |     |     |     |     |
| Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 130 |     |     |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 145 |     |     |     |     |     | 150 |     |     |     | 155 |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 165 |     |     |     |     |     |     | 170 |     |     |     | 175 |     |     |     |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 180 |     |     |     |     |     |     | 185 |     |     |     | 190 |     |     |     |
| Ser | Ser | Leu | Gly | Thr | Lys | Thr | Tyr | Thr | Cys | Asn | Val | Asp | His | Lys | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 195 |     |     |     |     |     | 200 |     |     |     | 205 |     |     |     |     |
| Ser | Asn | Thr | Lys | Val | Asp | Lys | Arg | Val | Glu | Ser | Lys | Tyr | Gly | Pro | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 210 |     |     |     |     |     | 215 |     |     |     | 220 |     |     |     |     |
| Cys | Pro | Ser | Cys | Pro | Ala | Pro | Glu | Phe | Leu | Gly | Gly | Pro | Ser | Val | Phe |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 225 |     |     |     |     |     | 230 |     |     |     | 235 |     |     |     | 240 |
| Leu | Phe | Pro | Pro | Lys | Pro | Lys | Asp | Thr | Leu | Met | Ile | Ser | Arg | Thr | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 245 |     |     |     |     |     |     | 250 |     |     |     | 255 |     |     |     |
| Glu | Val | Thr | Cys | Val | Val | Asp | Val | Ser | Gln | Glu | Asp | Pro | Glu | Val |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 260 |     |     |     |     |     | 265 |     |     |     | 270 |     |     |     |     |
| Gln | Phe | Asn | Trp | Tyr | Val | Asp | Gly | Val | Glu | Val | His | Asn | Ala | Lys | Thr |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     | 275 |     |     |     |     |     | 280 |     |     |     | 285 |     |     |     |     |

Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser Val  
 290 295 300  
 Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys  
 305 310 315 320  
 Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile Ser  
 325 330 335  
 Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro  
 340 345 350  
 Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val  
 355 360 365  
 Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly  
 370 375 380  
 Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp  
 385 390 395 400  
 Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg Trp  
 405 410 415  
 Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His  
 420 425 430  
 Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys  
 435 440 445

<210> 63  
 <211> 642  
 <212> DNA  
 <213> Homosapien

<400> 63  
 gacatccaga tgacccagtc tccatccctcc ctgtctgcat ctgttaggaga cagagtcacc 60  
 atcaacttgcc aggcgagtc ggacatttagc aactattaa attggtatca gcagaaaccca 120  
 gggaaaagccc ctaaactcct gatctacgtat gcatccaatt tgaaaacagg ggtcccatca 180  
 aggttcagtg gaagtggatc tggacagat tttacttca ccatcaacag cctgcagcct 240  
 gaagatattt caacatatta ctgtcaagaa tataataatc tcccgtacag ttttggccag 300  
 gggaccaagt tggagatcaa acgaactgtg gctgcaccat ctgtcttcat cttccggcca 360  
 tctgatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420  
 cccagagagg ccaaagtaca gtgaaagggtg gataacgccc tccaatcggt taactccag 480  
 gagagtgtca cagagcagga cagaaggac agcacctaca gcctcagcag caccctgacg 540  
 ctgagcaaag cagactacga gaaacacaaa gtctacgcct gccaagtcac ccatcaggc 600  
 ctgagctcgc ccgtcacaaa gagttcaac aggggagagt gt 642

<210> 64  
 <211> 214  
 <212> PRT  
 <213> Homosapien

<400> 64  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Gln Ala Ser Gln Asp Ile Ser Asn Tyr  
 20 25 30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
 35 40 45  
 Tyr Asp Ala Ser Asn Leu Glu Thr Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Asp Phe Thr Phe Thr Ile Asn Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Ile Ala Thr Tyr Tyr Cys Gln Glu Tyr Asn Asn Leu Pro Tyr

|   |     |     |     |
|---|-----|-----|-----|
| 85  | 90  | 95  |     |
| Ser Phe Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Ala Ala |     |     |     |
| 100   | 105 | 110 |     |
| Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser Gly |     |     |     |
| 115   | 120 | 125 |     |
| Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu Ala |     |     |     |
| 130   | 135 | 140 |     |
| Lys Val Gln Trp Lys Val Asp Asn Ala Leu Gln Ser Gly Asn Ser Gln |     |     |     |
| 145   | 150 | 155 | 160 |
| Glu Ser Val Thr Glu Gln Asp Ser Lys Asp Ser Thr Tyr Ser Leu Ser |     |     |     |
| 165   | 170 | 175 |     |
| Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr Glu Lys His Lys Val Tyr |     |     |     |
| 180   | 185 | 190 |     |
| Ala Cys Glu Val Thr His Gln Gly Leu Ser Ser Pro Val Thr Lys Ser |     |     |     |
| 195   | 200 | 205 |     |
| Phe Asn Arg Gly Glu Cys   |     |     |     |
| 210   |     |     |     |

<210> 65  
 <211> 1341  
 <212> DNA  
 <213> Homosapien

<400> 65  
 caggtccagc tggtagcgtc tggggctgag gtgaagaagc ctggggcctc agtgcaggc 60  
 tcctgcaagg tttccggaga caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggta aacaatctac 180  
 gcacggaaatg tccaggccag agtcaccatg accgaggaca catctacaga cacagttac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt atttctgtgc aacagattca 300  
 cgtggatata gtggctactt tgacaactgg ggccaggaa ccctggtcac cgtctccctca 360  
 gcttccacca agggcccatc cgtttccccc ctggcgccct gtcggaggag cacctccgag 420  
 agcacagccg ccctgggctg cctggtaag gactacttcc ccgaaccgggt gacgggtgtcg 480  
 tggaaacttag cgcgcctgac cagcggcgtg cacaccccttcc cgctgtccct acagtcctca 540  
 ggactctact ccctcagcag cgtggtgacc gtgcctcca gcagcttggg cacgaagacc 600  
 tacacctgca acgttagatca caagccccagc aacaccaagg tgacaagag agttgagtcc 660  
 aaatatggtc ccccatgccc atcatgccc gcacctgagt tcctgggggg accatcagtc 720  
 ttcctgttcc ccccaaaacc caaggacact ctcatgatct cccggacccc tgaggtcacg 780  
 tgcgtggtag tggacgtgag ccaggaagac cccgaggatcc agttcaactg gtacgtggat 840  
 ggcgtggagg tgcataatgc caagacaaag ccgcgggagg agcagttcaa cagcacgtac 900  
 cgtgtggta gcgtccctcac cgtcctgac caggactggc tgaacggcaa ggagtacaag 960  
 tgcacaggctc ccaacaaagg cctccctgtcc tccatcgaga aaaccatctc caaagccaaa 1020  
 gggcagcccc gagagccaca ggtgtacacc ctgccccat cccaggagga gatgaccaag 1080  
 aaccaggta gcctgacctg cctggtaaaa ggcttctacc ccagcgcacat cgccgtggag 1140  
 tgggagagca atgggcagcc ggagaacaac tacaagacca cgcctcccgt gctggactcc 1200  
 gacggctctt cttccctcta cagcaggcta accgtggaca agagcaggta gcaggaggg 1260  
 aatgtcttct catgctccgt gatgcatgag gctctgcaca accactacac acagaagagc 1320  
 ctctccctgt ctctggtaa a 1341

<210> 66  
 <211> 447  
 <212> PRT  
 <213> Homosapien

<400> 66  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15

Ser Val Gln Val Ser Cys Lys Val Ser Gly Asp Thr Leu Thr Glu Leu  
     20                 25                 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
     35                 40                 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Arg Lys Phe  
     50                 55                 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
     65                 70                 75                 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys  
     85                 90                 95  
 Ala Thr Asp Ser Arg Gly Tyr Ser Gly Tyr Phe Asp Asn Trp Gly Gln  
     100                105                110  
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
     115                120                125  
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
     130                135                140  
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
     145                150                155                160  
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
     165                170                175  
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser Ser Val Val Thr Val Pro  
     180                185                190  
 Ser Ser Ser Leu Gly Thr Lys Thr Tyr Thr Cys Asn Val Asp His Lys  
     195                200                205  
 Pro Ser Asn Thr Lys Val Asp Lys Arg Val Glu Ser Lys Tyr Gly Pro  
     210                215                220  
 Pro Cys Pro Ser Cys Pro Ala Pro Glu Phe Leu Gly Gly Pro Ser Val  
     225                230                235                240  
 Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr  
     245                250                255  
 Pro Glu Val Thr Cys Val Val Asp Val Ser Gln Glu Asp Pro Glu  
     260                265                270  
 Val Gln Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys  
     275                280                285  
 Thr Lys Pro Arg Glu Glu Gln Phe Asn Ser Thr Tyr Arg Val Val Ser  
     290                295                300  
 Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys  
     305                310                315                320  
 Cys Lys Val Ser Asn Lys Gly Leu Pro Ser Ser Ile Glu Lys Thr Ile  
     325                330                335  
 Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro  
     340                345                350  
 Pro Ser Gln Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu  
     355                360                365  
 Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn  
     370                375                380  
 Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser  
     385                390                395                400  
 Asp Gly Ser Phe Phe Leu Tyr Ser Arg Leu Thr Val Asp Lys Ser Arg  
     405                410                415  
 Trp Gln Glu Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu  
     420                425                430  
 His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Leu Gly Lys  
     435                440                445

<211> 660  
<212> DNA  
<213> Homosapien

<400> 67  
gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcga gaggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctca acaataacaa ctacttagtt 120  
tggtaccagc agaaaccagg acagcctctt aaattgctca ttactggc atctaccgg 180  
gaattcgggg ttccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttattttct 300  
ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tcccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
caatcggta actcccagga gagtgtcaca gaggcagaca gcaaggacag cacctacagc 540  
ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600  
gaagtcaaccc atcaggccc gactcgccc gtcacaaaga gcttcaacag gggagagtgt 660

<210> 68  
<211> 220  
<212> PRT  
<213> Homosapien

<400> 68  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Asn Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Phe Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Phe Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205  
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 69  
<211> 556  
<212> DNA

<213> Homosapien

<400> 69

caggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctact gatttatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagt gatgggaggt tttgatcctg aagatggta aacaatctac 180  
gcacagaagt tccaggccag agtaccatg accgagagaca catcttcaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacccacgaa 300  
ttttggagt gttattttga ctactggggc cagggAACCC tggtcaccgt ctcctcagct 360  
tccaccaagg gccccatccgt cttcccccgt gcgcctgtct ccaggagcac ctccgagagc 420  
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ccctgaccag cggcgtgcac accttcccg ctgtcctaca gtcctcagga 540  
ctctactccc tcagca 556

<210> 70

<211> 185

<212> PRT

<213> Homosapien

<400> 70

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys, Lys Val Ser Gly Tyr Thr Leu Thr Asp Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Ser Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 71

<211> 476

<212> DNA

<213> Homosapien

<400> 71

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
atcaactgca agtccagccaa gagggtttta ttccagctcca acaataagag ctacttaact 120  
tggtaccaggc agaaaccagg acagcctctt aaattactca ttttctgggc atctatccgg 180  
gaatccgggg tccctgaccg aatcagtgcc agcgggtctg ggacagatct cactctcacc 240  
atcagcagcc tgcaggctga agatgcggca gtttattact gtcagcaata ttatagtagt 300

ccgtggacgt tcggccaagg gaccaaggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgc 476

<210> 72  
<211> 158  
<212> PRT  
<213> Homosapien

<400> 72  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Phe Ser  
20 25 30  
Ser Asn Asn Lys Ser Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Phe Trp Ala Ser Ile Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Ile Ser Gly Ser Gly Thr Asp Leu Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Ala Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn  
145 150 155

<210> 73  
<211> 546  
<212> DNA  
<213> Homosapien

<400> 73  
cagggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctcagt gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggta aataatccac 180  
gcacagaagt tccaggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacaggcgt 300  
ttttggagtg gttattacct tgactgggtgg ggccaggaa ccctggtcac cgtctccctca 360  
gcttccacca agggcccatc cgtttcccc ctggcgcctc gtcggaggag cacctccgag 420  
agcacacagccg ccctgggctg cctggtaag gactactcc cccaaaccgggt gacgggtgtcg 480  
tggaaactcag gcgcctgac cagcggcgtg cacacccttcc cggctgtcct acagtcctca 540  
ggactt 546

<210> 74  
<211> 182  
<212> PRT  
<213> Homosapien

<400> 74  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15

Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Ile Ile His Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Gly Asp Phe Trp Ser Gly Tyr Tyr Leu Asp Trp Trp Gly Gln  
 100 105 110  
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
 115 120 125  
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
 130 135 140  
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
 145 150 155 160  
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
 165 170 175  
 Leu Gln Ser Ser Gly Leu  
 180

<210> 75  
 <211> 457  
 <212> DNA  
 <213> Homosapien

<400> 75  
 gaaatagtga tgatgcagtc tccagccacc ctgtctgtgt ctccagggga aagagccacc 60  
 ctctcctgca gggccagtc gagggttaac agcaacttag cctggtagcca gcagaaacct 120  
 ggcaggctc ccaggctct catcaacggc gcatccacca gggccactgg catccagcc 180  
 aggttcagtg gcagtgggtc tgggacagag ttcaccctca ccatcagcag cctgcagtct 240  
 gaagattttgc caatttatta ctgtcagcag tataatgact ggcctacgtt cacttcggc 300  
 ggagggacca aggtggagat caatcgaact gtggctgcac catctgtctt catctcccg 360  
 ccatctgatg agcagttgaa atctggaaact gcctctgttg tgcctgct gaataacttc 420  
 tatcccagag aggccaaagt acagtggaa ggtggat 457

<210> 76  
 <211> 152  
 <212> PRT  
 <213> Homosapien

<400> 76  
 Glu Ile Val Met Met Gln Ser Pro Ala Thr Leu Ser Val Ser Pro Gly  
 1 5 10 15  
 Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Asn Ser Asn  
 20 25 30  
 Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu Ile  
 35 40 45  
 Asn Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Ala Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Ser  
 65 70 75 80  
 Glu Asp Phe Ala Ile Tyr Tyr Cys Gln Gln Tyr Asn Asp Trp Pro Thr  
 85 90 95

Phe Thr Phe Gly Gly Thr Lys Val Glu Ile Asn Arg Thr Val Ala  
 100 105 110  
 Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser  
 115 120 125  
 Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu  
 130 135 140  
 Ala Lys Val Gln Trp Glu Gly Gly  
 145 150

<210> 77  
 <211> 470  
 <212> DNA  
 <213> Homosapien

<400> 77  
 caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggctttagt gatgggaggt tttgatctg aagatggtga aacaatgtac 180  
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccgacgat 300  
 ttttggagtg gttatttga ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
 tccaccaagg gccccatcggt cttccccctg gcgcctgtgt ccaggagcac ctccgagagc 420  
 acagcggccc tgggctggct ggtcaaggac tacttccccg aaccggcagg 470

<210> 78  
 <211> 156  
 <212> PRT  
 <213> Homosapien

<400> 78  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Met Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110  
 Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
 115 120 125  
 Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
 130 135 140  
 Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Ala  
 145 150 155

<210> 79  
 <211> 490  
 <212> DNA  
 <213> Homosapien

<400> 79

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggacga gagggccacc 60  
atcaactgca agtccagcca gagtgtttt tacagtcacc accaaaagaa ctacttagtt 120  
tggtatcagc agaagccagg acagcctccct aagctgctcc tttactgggc atctatccgg 180  
gaatccgggg tccctgaccc attcagtgcc agcgggtctg ggacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcacaaag ttattttact 300  
ccgtggacgt tcggccaaagg gaccaagggtg gaaatcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
caatcgggta 490

<210> 80

<211> 163

<212> PRT

<213> Homosapien

<400> 80

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Val | Met | Thr | Gln | Ser | Pro | Asp | Ser | Leu | Ala | Val | Ser | Leu | Asp |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Arg | Ala | Thr | Ile | Asn | Cys | Lys | Ser | Ser | Gln | Ser | Val | Leu | Tyr | Ser |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     |     | 30  |     |     |
| Pro | Asn | Gln | Lys | Asn | Tyr | Leu | Val | Trp | Tyr | Gln | Gln | Lys | Pro | Gly | Gln |
|     |     |     |     |     | 35  |     |     | 40  |     |     |     | 45  |     |     |     |
| Pro | Pro | Lys | Leu | Leu | Tyr | Trp | Ala | Ser | Ile | Arg | Glu | Ser | Gly | Val |     |
|     |     |     |     |     | 50  |     |     | 55  |     |     | 60  |     |     |     |     |
| Pro | Asp | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Gly | Thr | Asp | Phe | Thr | Leu | Thr |
|     |     |     |     |     | 65  |     |     | 70  |     |     | 75  |     |     | 80  |     |
| Ile | Ser | Ser | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Tyr | Cys | Gln | Gln |
|     |     |     |     |     | 85  |     |     | 90  |     |     | 95  |     |     |     |     |
| Ser | Tyr | Phe | Thr | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile |
|     |     |     |     |     | 100 |     |     | 105 |     |     | 110 |     |     |     |     |
| Lys | Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp |
|     |     |     |     |     | 115 |     |     | 120 |     |     | 125 |     |     |     |     |
| Glu | Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn |
|     |     |     |     |     | 130 |     |     | 135 |     |     | 140 |     |     |     |     |
| Phe | Tyr | Pro | Arg | Glu | Ala | Lys | Val | Gln | Trp | Lys | Val | Asp | Asn | Ala | Leu |
|     |     |     |     |     | 145 |     |     | 150 |     |     | 155 |     |     | 160 |     |
| Gln | Ser | Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 81

<211> 556

<212> DNA

<213> Homosapien

<400> 81

cagggtccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatccctg aagatgtatc aacaatctac 180  
gcacagaagt tccaggccag agtcaccatc accgaggaca catctacaga cacagccttc 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccacatc 300  
ttttggagtg gttatccatc ctactggggc cagggaaaccc tggtcaccgt ctccctcagct 360  
tccaccaagg gcccattccgt ctccccctg ggcgcctgtgt ccaggagcac ctccgagagc 420  
acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcgcc ccctgaccac cggcgatc accttccccgg ctgtcctaca gtcctcaggaa 540

ctctactccc tcagca

556

<210> 82

<211> 185

<212> PRT

<213> Homosapien

<400> 82

Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Asp Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Phe  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr His Asp Phe Trp Ser Gly Tyr Phe His Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu Tyr Ser Leu Ser  
180 185

<210> 83

<211> 476

<212> DNA

<213> Homosapien

<400> 83

gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctccg acaataagag ctacttagtt 120  
tggtaccaggc agaaaccagg acagcctcct aaggtgctca ttactggc atctattcgg 180  
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatactagt 300  
ccgtggacgt tcggccaagg gaccaaggta gaaatcaaacc gaaactgtggc tgcaccatct 360  
gtcttcatct tcccgccatc tggatggcag ttgaaatctg gaaactgcctc tggtgtgtc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgc 476

<210> 84

<211> 158

<212> PRT

<213> Homosapien

<400> 84

Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Arg | Ala | Thr | Ile | Asn | Cys | Lys | Ser | Ser | Gln | Ser | Val | Leu | Tyr | Ser |
| 20  |     |     |     |     |     |     | 25  |     |     |     |     |     | 30  |     |     |
| Ser | Asp | Asn | Lys | Ser | Tyr | Leu | Val | Trp | Tyr | Gln | Gln | Lys | Pro | Gly | Gln |
| 35  |     |     |     |     |     |     | 40  |     |     |     |     | 45  |     |     |     |
| Pro | Pro | Lys | Val | Leu | Ile | Tyr | Trp | Ala | Ser | Ile | Arg | Glu | Ser | Gly | Val |
| 50  |     |     |     |     |     |     | 55  |     |     |     | 60  |     |     |     |     |
| Pro | Asp | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Gly | Thr | Asp | Phe | Thr | Leu | Thr |
| 65  |     |     |     |     |     |     | 70  |     |     |     | 75  |     |     | 80  |     |
| Ile | Ser | Ser | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Tyr | Cys | Gln | Gln |
|     |     |     |     |     |     |     | 85  |     |     |     | 90  |     |     | 95  |     |
| Tyr | Tyr | Thr | Ser | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile |
|     |     |     |     |     |     |     | 100 |     |     |     | 105 |     |     | 110 |     |
| Lys | Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp |
|     |     |     |     |     |     |     | 115 |     |     |     | 120 |     |     | 125 |     |
| Glu | Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn |
|     |     |     |     |     |     |     | 130 |     |     |     | 135 |     |     | 140 |     |
| Phe | Tyr | Pro | Arg | Glu | Ala | Lys | Val | Gln | Trp | Lys | Val | Asp | Asn |     |     |
|     |     |     |     |     |     |     | 145 |     |     |     | 150 |     |     | 155 |     |

<210> 85  
 <211> 543  
 <212> DNA  
 <213> Homosapien

<400> 85  
 caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgtttaagg ttccggata caccctactt gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgaaatg gatggggaggt tttgatccctg aagatggtga aacaatctac 180  
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aatccacgag 300  
 ttttggagtg gtttattttga ctactggggc cagggaaacc tggtcaccgt ctcttcagct 360  
 tccaccaagg gccccatccgt ctccccctg gccccctgct ccaggagcac ctccgagagc 420  
 acagccgccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcgtgg 480  
 aactcaggcg ccctgaccag cggcgtgcac accttccccg ctgtcctaca gtcctcagga 540  
 ctt

<210> 86  
 <211> 181  
 <212> PRT  
 <213> Homosapien

<400> 86  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Ile His Glu Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
 100 105 110

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Leu | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
| 115 |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 125 |
| Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu |
| 130 |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 140 |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
| 145 |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 175 |
| Gln | Ser | Ser | Gly | Leu |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 180 |

<210> 87  
<211> 477  
<212> DNA  
<213> Homosapien

<400> 87  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60  
atcaactgca agtccagcct gagggtttta tacagctcca acaataagaa ctatttagtt 120  
tggcacccctc agaaaccagg acagccctcct aagttgtca ttactgggc atctacccgg 180  
gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggccga agatgtggca gtttattact gtcagcaata ttatagttct 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgcacccatct 360  
gtcttcatct tcccgcctatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 88  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 88  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Leu Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Leu Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala  
145 150 155

<210> 89  
<211> 1335

<212> DNA

<213> Homosapien

<400> 89

|              |             |            |             |            |             |      |
|--------------|-------------|------------|-------------|------------|-------------|------|
| cagggtccagc  | tggtagcagtc | tggggctgag | gtgaagaagc  | ctggggcctc | agtgaaggtc  | 60   |
| tcctgcgaaagg | tttccggata  | caccctca   | gaattatcca  | tgcactgggt | gcgacagact  | 120  |
| cctggaaaag   | ggcttgagtg  | gatgggaggt | tttgatcctg  | aaagatgtga | aacaatctac  | 180  |
| gcacagaagt   | tccaggacag  | agtacccatg | accgaggaca  | catctacaga | cacagcctac  | 240  |
| atggaaactga  | gcagcctgag  | atctgaggac | acggccgtgt  | attactgtgc | aacaaacgt   | 300  |
| ttttggactg   | gttattatga  | ctactggggc | cagggaaccc  | tggtcaccgt | ctcctcagcc  | 360  |
| tccaccaagg   | gcccatcggt  | cttccccctg | gcgcctgct   | ccaggagcac | ctccgagagc  | 420  |
| acagcggccc   | tgggctgcct  | ggtcaaggac | tacttccccg  | aaccgtgtac | ggtgtcggtg  | 480  |
| aactcaggcg   | ctctgaccag  | cggtgtgcac | accttcccag  | ctgtcctaca | gtcctcaga   | 540  |
| ctctactccc   | tcagcagcgt  | ggtgaccgtg | ccctccagca  | acttcggcac | ccagacactac | 600  |
| acctgcaacg   | tagatcacaa  | gcccagcaac | accaagggtgg | acaagacagt | tgagcgc当地   | 660  |
| tgttgtgtcg   | agtgc当地cacc | gtgcccagca | ccacctgtgg  | caggaccgtc | agtcttc当地   | 720  |
| ttccccccaa   | aacccaagga  | caccctcatg | atctcccgga  | cccctgaggt | cacgtgc当地   | 780  |
| gtggtgacg    | ttagccacga  | agaccccgag | gtccagttca  | actggtagt  | gacggc当地    | 840  |
| gaggtgcata   | atgccaagac  | aaagccacgg | gaggagcagt  | tcaacagcac | gttccgtgt   | 900  |
| gtcagcgtcc   | tcaccgttgt  | gcaccaggac | tggctgaacg  | gcaaggagta | caagtgc当地   | 960  |
| gtctccaaca   | aaggcctccc  | agccccatc  | gagaaaacca  | tctccaaaac | caaagggc当地  | 1020 |
| ccccgagaac   | cacaggtgta  | caccctgccc | ccatcccggg  | aggagatgac | caagaaccag  | 1080 |
| gtcagcctga   | cctgcctggt  | caaaggcttc | taccccgagcg | acatcgccgt | ggagtggag   | 1140 |
| agcaatgggc   | agccggagaa  | caactacaag | accacacctc  | ccatgctgga | ctccgacg    | 1200 |
| tccttcttcc   | tctacagcaa  | gctcaccgtg | gacaagagca  | ggtggcagca | ggggAACGTC  | 1260 |
| ttctcatgtc   | ccgtgtatgca | tgaggctctg | cacaaccact  | acacggagaa | gagcctctcc  | 1320 |
| ctgtctccgg   | gtaaaa      |            |             |            |             | 1335 |

<210> 90

<211> 445

<212> PRT

<213> Homosapien

<400> 90

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys | Lys | Pro | Gly | Ala |
| 1   |     |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Val | Lys | Val | Ser | Cys | Lys | Val | Ser | Gly | Tyr | Thr | Leu | Thr | Glu | Leu |
|     |     |     |     |     | 20  |     |     |     | 25  |     |     |     | 30  |     |     |
| Ser | Met | His | Trp | Val | Arg | Gln | Thr | Pro | Gly | Lys | Gly | Leu | Glu | Trp | Met |
|     |     |     |     |     | 35  |     |     | 40  |     |     |     | 45  |     |     |     |
| Gly | Gly | Phe | Asp | Pro | Glu | Asp | Gly | Glu | Thr | Ile | Tyr | Ala | Gln | Lys | Phe |
|     |     |     |     |     | 50  |     |     | 55  |     |     | 60  |     |     |     |     |
| Gln | Asp | Arg | Val | Thr | Met | Thr | Glu | Asp | Thr | Ser | Thr | Asp | Thr | Ala | Tyr |
|     |     |     |     |     | 65  |     | 70  |     |     | 75  |     |     |     | 80  |     |
| Met | Glu | Leu | Ser | Ser | Leu | Arg | Ser | Glu | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |
|     |     |     |     |     | 85  |     |     |     | 90  |     |     |     | 95  |     |     |
| Ala | Thr | Asn | Asp | Phe | Trp | Thr | Gly | Tyr | Tyr | Asp | Tyr | Trp | Gly | Gln | Gly |
|     |     |     |     |     | 100 |     |     | 105 |     |     |     | 110 |     |     |     |
| Thr | Leu | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |
|     |     |     |     |     | 115 |     |     | 120 |     |     |     | 125 |     |     |     |
| Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu |
|     |     |     |     |     | 130 |     | 135 |     |     |     | 140 |     |     |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |
|     |     |     |     |     | 145 |     | 150 |     |     | 155 |     |     |     | 160 |     |
| Asn | Ser | Gly | Ala | Leu | Thr | Ser | Gly | Val | His | Thr | Phe | Pro | Ala | Val | Leu |
|     |     |     |     |     | 165 |     |     | 170 |     |     |     | 175 |     |     |     |
| Gln | Ser | Ser | Gly | Leu | Tyr | Ser | Leu | Ser | Ser | Val | Val | Thr | Val | Pro | Ser |

|   |     |     |
|---|-----|-----|
| 180   | 185 | 190 |
| Ser Asn Phe Gly Thr Gln Thr Tyr Thr Cys Asn Val Asp His Lys Pro |     |     |
| 195   | 200 | 205 |
| Ser Asn Thr Lys Val Asp Lys Thr Val Glu Arg Lys Cys Cys Val Glu |     |     |
| 210   | 215 | 220 |
| Cys Pro Pro Cys Pro Ala Pro Pro Val Ala Gly Pro Ser Val Phe Leu |     |     |
| 225   | 230 | 235 |
| Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu |     |     |
| 245   | 250 | 255 |
| Val Thr Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Gln |     |     |
| 260   | 265 | 270 |
| Phe Asn Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys |     |     |
| 275   | 280 | 285 |
| Pro Arg Glu Glu Gln Phe Asn Ser Thr Phe Arg Val Val Ser Val Leu |     |     |
| 290   | 295 | 300 |
| Thr Val Val His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys |     |     |
| 305   | 310 | 315 |
| Val Ser Asn Lys Gly Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys |     |     |
| 325   | 330 | 335 |
| Thr Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser |     |     |
| 340   | 345 | 350 |
| Arg Glu Glu Met Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys |     |     |
| 355   | 360 | 365 |
| Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln |     |     |
| 370   | 375 | 380 |
| Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Met Leu Asp Ser Asp Gly |     |     |
| 385   | 390 | 395 |
| Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln |     |     |
| 405   | 410 | 415 |
| Gln Gly Asn Val Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn |     |     |
| 420   | 425 | 430 |
| His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys             |     |     |
| 435   | 440 | 445 |

<210> 91  
 <211> 660  
 <212> DNA  
 <213> Homosapien

<400> 91  
 gacatcgta tgaccaggc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
 atcaactgca agtccaggcca gagtgttta tacagctcca acaataagaa ctacttagtt 120  
 tggtaccagc agaaaccagg acagcctcct aagacgctca ttactggc atctacccgg 180  
 gaatccgggg tccctgaccc attcaagtggc agcgggtctg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggctga agatgtgggaa gtttattact gtcacaacaata ttataactgt 300  
 ccgtggacgt tcggccaaagg gaccaagggtg gaaatcaagc gaactgtggc tgcaccatct 360  
 gtcttcatct tccccccatc tggatggcag ttgaaatctg gaactgcctc tggatgtgc 420  
 ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgaa taacccctc 480  
 caatcgggta actcccaggaa gagtgtcaca gagcaggaca gcaaggacag cacctacagc 540  
 ctcagcagca ccctgacgct gagcaaagca gactacgaga aacacaaaagt ctacccctgc 600  
 gaagtcaccc atcaggccct gagctcgccc gtcacaaaaga gcttcaacag gggagagtgt 660

<210> 92  
 <211> 220  
 <212> PRT

<213> Homosapien

<400> 92  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Thr Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Gly Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Thr Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys Asp  
165 170 175  
Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp Tyr  
180 185 190  
Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Gln Gly Leu Ser  
195 200 205  
Ser Pro Val Thr Lys Ser Phe Asn Arg Gly Glu Cys  
210 215 220

<210> 93

<211> 560

<212> DNA

<213> Homosapien

<400> 93

caggtgcagc tgcaggagtc gggcccagga ctggtaaagc cgtcacagac cctgtccctc 60  
acctgcactg tctctggtgg ctccatcagc agtgggggtt actactggag ctggatccgc 120  
cagcacccag ggaaggccct ggagtggatt gggtacatct attacagtgg gagcacctac 180  
tacaacccgt ccctcaagag tcgagttatc atatcaatgc acacgtctaa gaaccagttc 240  
tccctgaagc tgacctctgt gactgccgcg gacacggccg tgattactg tgcgagatca 300  
tatagcagct cgtccccact ggtcgaccc ctggggccag ggaaccctgg tcaccgtctc 360  
ctcagcttcc accaagggcc catccgtctt cccccctggcg ccctgctcca ggagcacctc 420  
cgagagcaca gccgcctgg gctgcctggt caaggactac ttccccgaac cggtgacgg 480  
gtcggtggaaac tcaggcgccc tgaccagcgg cgtgcacacc ttcccgctg tcctacagtc 540  
ctcaggactc tactccctca 560

<210> 94

<211> 186

<212> PRT

<213> Homosapien

<400> 94

Gln Val Gln Leu Gln Glu Ser Gly Pro Gly Leu Val Lys Pro Ser Gln

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 5   | 10  | 15  |     |     |     |     |     |     |     |     |     |     |     |     |
| Thr | Leu | Ser | Leu | Thr | Cys | Thr | Val | Ser | Gly | Gly | Ser | Ile | Ser | Ser | Gly |
|     |     |     |     |     |     |     |     |     | 20  | 25  |     |     |     |     | 30  |
| Gly | Tyr | Tyr | Trp | Ser | Trp | Ile | Arg | Gln | His | Pro | Gly | Lys | Gly | Leu | Glu |
|     |     |     |     |     |     |     |     |     | 35  | 40  |     |     |     |     | 45  |
| Trp | Ile | Gly | Tyr | Ile | Tyr | Tyr | Ser | Gly | Ser | Thr | Tyr | Tyr | Asn | Pro | Ser |
|     |     |     |     |     |     |     |     |     | 50  | 55  |     |     |     |     | 60  |
| Leu | Lys | Ser | Arg | Val | Ile | Ile | Ser | Val | Asp | Thr | Ser | Lys | Asn | Gln | Phe |
|     |     |     |     |     |     |     |     |     | 65  | 70  |     |     |     |     | 80  |
| Ser | Leu | Lys | Leu | Thr | Ser | Val | Thr | Ala | Ala | Asp | Thr | Ala | Val | Tyr | Tyr |
|     |     |     |     |     |     |     |     |     | 85  | 90  |     |     |     |     | 95  |
| Cys | Ala | Arg | Ser | Tyr | Ser | Ser | Ser | Pro | Leu | Val | Arg | Pro | Leu | Gly |     |
|     |     |     |     |     |     |     |     |     | 100 | 105 |     |     |     |     | 110 |
| Pro | Gly | Asn | Pro | Gly | His | Arg | Leu | Leu | Ser | Phe | His | Gln | Gly | Pro | Ile |
|     |     |     |     |     |     |     |     |     | 115 | 120 |     |     |     |     | 125 |
| Arg | Leu | Pro | Pro | Gly | Ala | Leu | Leu | Gln | Glu | His | Leu | Arg | Glu | His | Ser |
|     |     |     |     |     |     |     |     |     | 130 | 135 |     |     |     |     | 140 |
| Arg | Pro | Gly | Leu | Pro | Gly | Gln | Gly | Leu | Leu | Pro | Arg | Thr | Gly | Asp | Gly |
|     |     |     |     |     |     |     |     |     | 145 | 150 |     |     |     |     | 160 |
| Val | Val | Glu | Leu | Arg | Arg | Pro | Asp | Gln | Arg | Arg | Ala | His | Leu | Pro | Gly |
|     |     |     |     |     |     |     |     |     | 165 | 170 |     |     |     |     | 175 |
| Cys | Pro | Thr | Val | Leu | Arg | Thr | Leu | Leu | Pro |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     | 180 | 185 |     |     |     |     |     |

<210> 95  
 <211> 458  
 <212> DNA  
 <213> Homosapien

<400> 95  
 gacatccaga tgacccagtc tccatccccc ctgtctgcat ctgttaggaga cagagtcacc 60  
 atcaacttgcgc gggcaagtca gggcattaga aatgatttag gctggtatca gcagaaacca 120  
 gggaaagccc ctaagcgccct gatctatgct gcatccagtt tgcaaagtgg ggtcccatca 180  
 aggttcagcg gcagtggatc tgggacagaa ttcactctca caatcagcag cctgcagcct 240  
 gaagattttg caacttatta ctgtctacag cataatagtt acccattcac tttcggccct 300  
 gggacccaaag tggatataaa acgaaactgtg gctgcaccat ctgtcttcat cttccggcca 360  
 tctgtatgagc agttgaaatc tggaaactgcc tctgttgtgt gcctgctgaa taacttctat 420  
 cccagagagg ccaaagtaca gtggaaaggta gataacgc 458

<210> 96  
 <211> 152  
 <212> PRT  
 <213> Homosapien

<400> 96  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
 1 5 10 15  
 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
 20 25 30  
 Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
 35 40 45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
 50 55 60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
 65 70 75 80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Phe

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|     | 85  | 90  | 95  |     |     |     |     |     |     |     |     |     |     |     |     |
| Thr | Phe | Gly | Pro | Gly | Thr | Lys | Val | Asp | Ile | Lys | Arg | Thr | Val | Ala | Ala |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 100 |     |     |     |     | 105 |     |     |     |     |     | 110 |     |
| Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp | Glu | Gln | Leu | Lys | Ser | Gly |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 115 |     |     |     |     | 120 |     |     |     |     | 125 |     |     |
| Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn | Phe | Tyr | Pro | Arg | Glu | Ala |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |     |     |
| Lys | Val | Gln | Trp | Lys | Val | Asp | Asn |     |     |     |     |     |     |     |     |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     | 145 |     |     |     | 150 |     |     |     |     |     |     |     |     |

<210> 97  
 <211> 559  
 <212> DNA  
 <213> Homosapien

<400> 97  
 caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
 tcctgcagg tttccggata caccctacta gaattatcca tgcactgggt gcgacaggct 120  
 cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggtga aacaatctac 180  
 gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacagcctac 240  
 atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcgc 300  
 gagttttgga gtggttatc ctaccactgg ggccaggaa cccctggtcac cgtctccctca 360  
 gcctccacca agggcccatc ggtttccccctt ctggccccc gctccaggag cacctccgag 420  
 agcacagcgg ccctgggctg cctggtcaag gactactcc cccaaaccggg gacgggtgtcg 480  
 tggactctag ggcgtctgac cagcggcgtg cacaccttcc cagctgtcct acagtccctca 540  
 ggactctact ccctcagca 559

<210> 98  
 <211> 186  
 <212> PRT  
 <213> Homosapien

<400> 98  
 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
 1 5 10 15  
 Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
 20 25 30  
 Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
 35 40 45  
 Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
 50 55 60  
 Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
 65 70 75 80  
 Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
 85 90 95  
 Ala Thr Asp Arg Glu Phe Trp Ser Gly Tyr Phe Tyr His Trp Gly Gln  
 100 105 110  
 Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
 115 120 125  
 Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
 130 135 140  
 Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
 145 150 155 160  
 Trp Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val  
 165 170 175  
 Leu Gln Ser Ser Gly Leu Tyr Ser Leu Ser

180

185

<210> 99  
<211> 491  
<212> DNA  
<213> Homosapien

<400> 99  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctgggcga gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acaatgagaaa cttcttagct 120  
tggtaccaggc agaaaccagg acagcctcct aaactgctca ttactgggc atctaccgg 180  
gaatccgggg tcccagaccg cttcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttataatagt 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgccacatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tttgtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctcc 480  
ccaatcgggt a 491

<210> 100  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 100  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30  
Ser Asn Asn Glu Asn Phe Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
35 40 45  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Asn Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Ser  
145 150 155 160  
Pro Ile Gly

<210> 101  
<211> 543  
<212> DNA  
<213> Homosapien

<400> 101  
caggtccagc tggcacagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120

cctggaaaag ggctttagtg gatgggaggt tttgatcctg aagatggtga aacaatctac 180  
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacaggctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300  
ttttggagtg gttatTTGA ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gccccatcggt ctccccctg gcgcctgtct ccaggagcac ctccgagagc 420  
acagcgcccc tgggctgcct ggtcaaggac tacttccccg aaccgggtgac ggtgtcggtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ctt 543

<210> 102  
<211> 181  
<212> PRT  
<213> Homosapien

<400> 102  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly Leu  
180

<210> 103  
<211> 491  
<212> DNA  
<213> Homosapien

<400> 103  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggccgaa gagggccacc 60  
atcaactgca agtccagtca gagtgTTTA tacaggtcta acaataagag ctacttagtt 120  
tggtaccaggc agaaactagg acagtctcct aagctgtca tttactgggc atctacccgg 180  
gaatccgggg tccctgaccc attcagtggc agcgggtctg ggacagattt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattatt gtcacaata ttatagtact 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacccctc 480  
ccaatcgggt a 491

<210> 104  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 104  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Arg  
20 25 30  
Ser Asn Asn Lys Ser Tyr Leu Val Trp Tyr Gln Gln Lys Leu Gly Gln  
35 40 45  
Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
50 55 60  
Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
65 70 75 80  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
85 90 95  
Tyr Tyr Ser Thr Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
100 105 110  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
115 120 125  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
130 135 140  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
145 150 155 160  
Pro Ile Gly

<210> 105  
<211> 499  
<212> DNA  
<213> Homosapien

<400> 105  
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttggatg gatggggaggt tttgatccctg aagatggtga aacaatctac 180  
gcacagaagt tccaggccag agtcaccatg accggggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagacgt 300  
ttttggatg gttatccatc ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt ctccccctg ggcgcctgt ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgacca 499

<210> 106  
<211> 166  
<212> PRT  
<213> Homosapien

<400> 106  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 35  | 40  | 45  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| Gly | Gly | Phe | Asp | Pro | Glu | Asp | Gly | Glu | Thr | Ile | Tyr | Ala | Gln | Lys | Phe |     |
| 50  |     |     |     |     | 55  |     |     |     |     | 60  |     |     |     |     |     |     |
| Gln | Gly | Arg | Val | Thr | Met | Thr | Glu | Asp | Thr | Ser | Thr | Asp | Thr | Ala | Tyr |     |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     |     | 80  |     |
| Met | Glu | Leu | Ser | Ser | Leu | Arg | Ser | Glu | Asp | Thr | Ala | Val | Tyr | Tyr | Cys |     |
|     |     |     |     |     |     |     |     |     |     | 85  |     | 90  |     | 95  |     |     |
| Ala | Thr | Asp | Asp | Phe | Trp | Ser | Gly | Tyr | Phe | Asp | Tyr | Trp | Gly | Gln | Gly |     |
|     |     |     |     |     |     |     |     |     |     | 100 |     | 105 |     | 110 |     |     |
| Thr | Leu | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly | Pro | Ser | Val | Phe |     |
|     |     |     |     |     |     |     |     |     |     | 115 |     | 120 |     | 125 |     |     |
| Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser | Thr | Ala | Ala | Leu |     |
|     |     |     |     |     |     |     |     |     |     | 130 |     | 135 |     | 140 |     |     |
| Gly | Cys | Leu | Val | Lys | Asp | Tyr | Phe | Pro | Glu | Pro | Val | Thr | Val | Ser | Trp |     |
|     |     |     |     |     |     |     |     |     |     | 145 |     | 150 |     | 155 |     | 160 |
| Asn | Ser | Gly | Ala | Leu | Thr |     |     |     |     |     |     |     |     |     |     |     |
|     |     |     |     |     | 165 |     |     |     |     |     |     |     |     |     |     |     |

<210> 107  
 <211> 448  
 <212> DNA  
 <213> Homosapien

<400> 107  
 gacatcgta tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gaggccacc 60  
 atcaactgca agtccagcca gagtgtttta tacagctcca acaataagaa ctacttagtt 120  
 tggtaccaggc agaaaccagg acaagcctcct aagctgctca ttactgggc atctacccgg 180  
 gaatccgggg tccctgaccg attcagtggc agcgggtctg ggacagattt cactctcacc 240  
 atcagcagcc tgcaggtcga agatgtggca gtttattact gtcagcaata ttatagtcct 300  
 acgtggacgt tcggccaagg gaccaagggtg gaaatcaaacc gaaactgtggc tgcaccatct 360  
 gtcttcatct tccgcacatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
 ctgctgaata acttctatcc cagagagg 448

<210> 108  
 <211> 149  
 <212> PRT  
 <213> Homosapien

<400> 108  
 Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 1 5 10 15  
 Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
 20 25 30  
 Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
 35 40 45  
 Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
 50 55 60  
 Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 65 70 75 80  
 Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 85 90 95  
 Tyr Tyr Ser Pro Thr Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
 100 105 110  
 Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
 115 120 125  
 Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn

130 135 140  
Phe Tyr Pro Arg Glu  
145

<210> 109  
<211> 540  
<212> DNA  
<213> Homosapien

<400> 109  
caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180  
gcacagaagt tccaggccag agtcaccatg accgaggaca catctacaga cacaggctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacggacgat 300  
tttggagtg gttatttga ctactgggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gccccatcggt ctccccctg gcgcctgct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgac accttcccag ctgtcctaca gtccctcagga 540

<210> 110  
<211> 180  
<212> PRT  
<213> Homosapien

<400> 110  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly  
180

<210> 111  
<211> 478  
<212> DNA

<213> Homosapien

<400> 111

gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcga gagggccacc 60  
atcaactgca agtccagcca gagtgtttt aacatgtcca acaataagaa ctacttagct 120  
tggtaccaggc agaaaccagg acagcctcct aagctgctca tttactggac atctacccgg 180  
gaatccgggg tccctgaccc attcagtgcc agcgggtctg tgacagatt cacttcacc 240  
atcagcagcc tgcaggctga agatgtggca gtttattact gtcagcaata ttatagttct 300  
ccgtggacgt tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgacccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgttgtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcct 478

<210> 112

<211> 159

<212> PRT

<213> Homosapien

<400> 112

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Asp | Ile | Val | Met | Thr | Gln | Ser | Pro | Asp | Ser | Leu | Ala | Val | Ser | Leu | Gly |
| 1   |     |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |
| Glu | Arg | Ala | Thr | Ile | Asn | Cys | Lys | Ser | Ser | Gln | Ser | Val | Leu | Tyr | Ser |
|     |     |     |     |     |     |     | 20  |     | 25  |     |     |     |     | 30  |     |
| Ser | Asn | Asn | Lys | Asn | Tyr | Leu | Ala | Trp | Tyr | Gln | Gln | Lys | Pro | Gly | Gln |
|     |     |     |     |     |     | 35  |     |     | 40  |     |     |     | 45  |     |     |
| Pro | Pro | Lys | Leu | Leu | Ile | Tyr | Trp | Thr | Ser | Thr | Arg | Glu | Ser | Gly | Val |
|     |     |     |     |     |     | 50  |     |     | 55  |     |     | 60  |     |     |     |
| Pro | Asp | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Val | Thr | Asp | Phe | Thr | Leu | Thr |
|     |     |     |     |     |     | 65  |     |     | 70  |     |     | 75  |     |     | 80  |
| Ile | Ser | Ser | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Tyr | Cys | Gln | Gln |
|     |     |     |     |     |     | 85  |     |     | 90  |     |     |     | 95  |     |     |
| Tyr | Tyr | Ser | Ser | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile |
|     |     |     |     |     |     | 100 |     |     | 105 |     |     |     | 110 |     |     |
| Lys | Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp |
|     |     |     |     |     |     | 115 |     |     | 120 |     |     | 125 |     |     |     |
| Glu | Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn |
|     |     |     |     |     |     | 130 |     |     | 135 |     |     | 140 |     |     |     |
| Phe | Tyr | Pro | Arg | Glu | Ala | Lys | Val | Gln | Trp | Lys | Val | Asp | Asn | Ala |     |
|     |     |     |     |     |     | 145 |     |     | 150 |     |     | 155 |     |     |     |

<210> 113

<211> 542

<212> DNA

<213> Homosapien

<400> 113

caggtccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcaagg tttccggata caccctcagt gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagtg gatggggaggt tttgatcctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt tttactgtgc aacaaggagg 300  
gaatatagtg gctactttga ctactggggc cagggAACCC tggtcaccgt ctcctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tacttcccc aaccgggtgac ggtgtcgtgg 480  
aactcaggcg ctctgaccag cggcgtgcac accttcccag ctgtcctaca gtcctcagga 540  
ct

<210> 114  
<211> 180  
<212> PRT  
<213> Homosapien

<400> 114  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Ser Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Phe Tyr Cys  
85 90 95  
Ala Thr Lys Arg Glu Tyr Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr Ser Gly Val His Thr Phe Pro Ala Val Leu  
165 170 175  
Gln Ser Ser Gly  
180

<210> 115  
<211> 477  
<212> DNA  
<213> Homosapien

<400> 115  
gacatcgtga tgacccagtc tccagactcc ctggctgtgt ctctggcgaa gagggccacc 60  
atcaactgca agtccagcca gagtgttta tacagctcca acagtaagaa ctacttagct 120  
tggttccagc agaaaaccagg acagcctccct aagctgctca tttactggc atctaccgg 180  
gaatccgggg tccctgaccg attcagtgcc agcgggtctg ggacagattt cactctcacc 240  
atcagccgcc tgcaggctga agatgtggca gtttattcct gtcagcaata ttttattact 300  
ccgtggacgt tcggccaaagg gaccaagggtg gaactcaaac gaactgtggc tgcaccatct 360  
gtcttcatct tccccccatc tgatgagcag ttgaaatctg gaactgcctc tgggtgtgc 420  
ctgctgaata acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcc 477

<210> 116  
<211> 159  
<212> PRT  
<213> Homosapien

<400> 116  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
1 5 10 15  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser  
20 25 30

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Ser | Asn | Ser | Lys | Asn | Tyr | Leu | Ala | Trp | Phe | Gln | Gln | Lys | Pro | Gly | Gln |
| 35  |     |     |     |     | 40  |     |     |     |     |     |     | 45  |     |     |     |
| Pro | Pro | Lys | Leu | Leu | Ile | Tyr | Trp | Ala | Ser | Thr | Arg | Glu | Ser | Gly | Val |
| 50  |     |     |     |     | 55  |     |     |     |     |     | 60  |     |     |     |     |
| Pro | Asp | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Gly | Thr | Asp | Phe | Thr | Leu | Thr |
| 65  |     |     |     |     | 70  |     |     |     |     | 75  |     |     |     | 80  |     |
| Ile | Ser | Arg | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Ser | Cys | Gln | Gln |
|     |     |     |     |     | 85  |     |     |     | 90  |     |     |     | 95  |     |     |
| Tyr | Phe | Ile | Thr | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Leu |
|     |     |     |     |     | 100 |     |     |     | 105 |     |     |     | 110 |     |     |
| Lys | Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp |
|     |     |     |     |     | 115 |     |     |     | 120 |     |     |     | 125 |     |     |
| Glu | Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn |
|     |     |     |     |     | 130 |     |     |     | 135 |     |     |     | 140 |     |     |
| Phe | Tyr | Pro | Arg | Glu | Ala | Lys | Val | Gln | Trp | Lys | Val | Asp | Asn | Ala |     |
|     |     |     |     |     | 145 |     |     |     | 150 |     |     |     | 155 |     |     |

<210> 117  
 <211> 459  
 <212> DNA  
 <213> Homosapien

<400> 117  
 caggtgcagc ctgagcagtc gggccagga ctggtaagc cctcgcagac cctctcactc 60  
 acctgtCCA tctccgggga cagtgtctc agcaacagtG ctgcttgaa ctggatcagg 120  
 cagtccctt cggaggcct tggatggctg ggaaggacat actacaggTC caagtggat 180  
 agtcatgtc agtatactgt gagaagtGGA ataaccatct acccagacac atccaagaac 240  
 cagttctccc tgcagctgaa ctctgtact cccgaggaca cggctgtgtt ttactgtgca 300  
 agagatcgga tttagtgggac ctatgtcggt atggacgtct ggggccaagg gaccacggc 360  
 accgtctcct cagcctccac caagggccca tcggcttcc ccctggcgcc cctgctccag 420  
 gagcacctcc gagagcacag cggccctggg ctgcctggc 459

<210> 118  
 <211> 153  
 <212> PRT  
 <213> Homosapien

<400> 118  
 Gln Val Gln Pro Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln  
 1 5 10 15  
 Thr Leu Ser Leu Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn  
 20 25 30  
 Ser Ala Ala Trp Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu  
 35 40 45  
 Trp Leu Gly Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala  
 50 55 60  
 Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn  
 65 70 75 80  
 Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val  
 85 90 95  
 Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp  
 100 105 110  
 Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys  
 115 120 125  
 Gly Pro Ser Val Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg  
 130 135 140

Glu His Ser Gly Pro Gly Leu Pro Gly  
145 150

<210> 119  
<211> 526  
<212> DNA  
<213> Homosapien

<400> 119  
ccagctcagc tcctggggct gctaattgctc tgggtccctg gatccaatga ggatattgtg 60  
atgaccaggc ctccactctc cctgccccgtc accccctggag agccggcctc catctcctgc 120  
aggtagtctc agagcctctt ggatagtgtat gatggaaaca cctatttggc ctggtacctg 180  
cagaagccag ggcagtcctcc acagctcctg atctatacgc tttccttgc ggcctctgga 240  
gtcccagaca ggttcagttgg cagttgggtca ggcactgatt tcacactgac aatcagcagg 300  
gtggaggctg aggtatgttgg agtttattttc tgcatttgcac gtatagagtt tccttcact 360  
ttccggcggag ggaccaaggt ggagatcaaa cgaactgtgg ctgcaccatc tgtcttcattc 420  
ttcccgccat ctgtatggca gttgaaatct ggaactgcct ctgttgtgtg cctgctgaat 480  
aacttctatc ccagagaggc caaagtacag tggaaagggtgg ataacg 526

<210> 120  
<211> 175  
<212> PRT  
<213> Homosapien

<400> 120  
Pro Ala Gln Leu Leu Gly Leu Leu Met Leu Trp Val Pro Gly Ser Asn  
1 5 10 15  
Glu Asp Ile Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Thr Pro  
20 25 30  
Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu Asp  
35 40 45  
Ser Asp Asp Gly Asn Thr Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly  
50 55 60  
Gln Ser Pro Gln Leu Leu Ile Tyr Thr Leu Ser Phe Arg Ala Ser Gly  
65 70 75 80  
Val Pro Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu  
85 90 95  
Thr Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met  
100 105 110  
Gln Arg Ile Glu Phe Pro Leu Thr Phe Gly Gly Thr Lys Val Glu  
115 120 125  
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser  
130 135 140  
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn  
145 150 155 160  
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn  
165 170 175

<210> 121  
<211> 499  
<212> DNA  
<213> Homosapien

<400> 121  
caggccagg tggtagtc tggggctgag gtgaagaacc ctggggcctc agtgaaggc 60

tcctgcaagg tttccggatc caccctcaact gaattatcca tgcactgggt gcgacaggct 120  
cctggaaaag ggcttgagt gatgggaggt tttgatctg aagatggta aacaatctac 180  
gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagtctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aaccaacgat 300  
tttggagtg gttatggta ctactggggc cagggAACCC tggtcaccgt ctccctcagcc 360  
tccaccaagg gcccattcggt ctccccctg gcgcctgtct ccaggagcac ctccgagagc 420  
acagcggccc tgggctgcct ggtcaaggac tactccccg aaccggtgac ggtgtcgtgg 480  
aactcaggcg ctctgacca 499

<210> 122  
<211> 166  
<212> PRT  
<213> Homosapien

<400> 122  
Gln Val Gln Val Val Gln Ser Gly Ala Glu Val Lys Asn Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Ser Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asp Gly Glu Thr Ile Tyr Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Thr Met Thr Glu Asp Thr Ser Thr Asp Thr Val Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asn Asp Phe Trp Ser Gly Tyr Phe Asp Tyr Trp Gly Gln Gly  
100 105 110  
Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu  
130 135 140  
Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser Trp  
145 150 155 160  
Asn Ser Gly Ala Leu Thr  
165

<210> 123  
<211> 536  
<212> DNA  
<213> Homosapien

<400> 123  
caggcttca tttctctgtt gctctggatc tctgatgtct atggggacat cgtgatgacc 60  
cagtcctccag actccctggc tggatctctg ggcgagaggg ccaccatcac ctgcaagtcc 120  
agccagactg ttttatacag ctccaacaat aagaactact tagtttggta tcagcagaaa 180  
tcaggacagc ctccataagct gctcattcac tggcatctc tccggaaatc cgggtccct 240  
gaccgattca gtggcagcgg gtcgggaca gattcacgc tcaccatcag cagccctgcag 300  
gctgaagatg tggcagtttta ttactgtcag caatattata gtatgtccgtg gacgttcggc 360  
caaggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctcccg 420  
ccatctgatg agcagttgaa atctggaact gcctctgtt tggcctgct gaataacttc 480  
tatcccaagag aggccaaagt acagtggaaag gtggataacg cccttccaaat cgggta 536

<210> 124  
<211> 178

<212> PRT  
<213> Homosapien

<400> 124

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Phe | Ile | Ser | Leu | Leu | Leu | Trp | Ile | Ser | Asp | Val | Tyr | Gly | Asp |
| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 15  |
| Ile | Val | Met | Thr | Gln | Ser | Pro | Asp | Ser | Leu | Ala | Val | Ser | Leu | Gly | Glu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 30  |
| Arg | Ala | Thr | Ile | Thr | Cys | Lys | Ser | Ser | Gln | Thr | Val | Leu | Tyr | Ser | Ser |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 45  |
| Asn | Asn | Lys | Asn | Tyr | Leu | Val | Trp | Tyr | Gln | Gln | Lys | Ser | Gly | Gln | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 60  |
| Pro | Lys | Leu | Leu | Ile | His | Trp | Ala | Ser | Ile | Arg | Glu | Ser | Gly | Val | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 80  |
| Asp | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Gly | Thr | Asp | Phe | Thr | Leu | Thr | Ile |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 95  |
| Ser | Ser | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Tyr | Cys | Gln | Gln | Tyr |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 110 |
| Tyr | Ser | Ser | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile | Lys |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 125 |
| Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp | Glu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 140 |
| Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn | Phe |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 160 |
| Tyr | Pro | Arg | Glu | Ala | Lys | Val | Gln | Trp | Lys | Val | Asp | Asn | Ala | Leu | Pro |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 175 |
| Ile | Gly |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

<210> 125  
<211> 414  
<212> DNA  
<213> Homosapien

<400> 125

caggtgcagg ctgagcagtc gggccagga ctggtaaagc cctcgcagac cctctcactc 60  
acctgtgcctt tctccgggaa cagtgtctct agctacagtg ctgcggaa ctggatcagg 120  
cagtccctt cgagaggcct tgagtggctg ggaaggacat actacaggc tcagggtat 180  
agtatcatg cagtatctgt gagaagtgcgataaaccatct acccagacac atccaaagaac 240  
cagttctccc tgcagctgaa ctctgtgact cccgaggaca cggctgtgta ttactgtgca 300  
agagatcgga ttagtggac ctatgtcggt atggacgtct gggcccaagg gaccacggc 360  
accgtctcct cagcctccac caagggcccc atcggtcttc cccctggccc cctc 414

<210> 126  
<211> 138  
<212> PRT  
<213> Homosapien

<400> 126

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Gln | Ala | Glu | Gln | Ser | Gly | Pro | Gly | Leu | Val | Lys | Pro | Ser | Gln |
| 1   |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 15  |
| Thr | Leu | Ser | Leu | Thr | Cys | Ala | Ile | Ser | Gly | Asp | Ser | Val | Ser | Ser | Tyr |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 30  |
| Ser | Ala | Ala | Trp | Asn | Trp | Ile | Arg | Gln | Ser | Pro | Ser | Arg | Gly | Leu | Glu |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | 45  |
| Trp | Leu | Gly | Arg | Thr | Tyr | Tyr | Arg | Ser | Lys | Trp | Tyr | Ser | Asp | His | Ala |
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

|   |     |     |    |
|---|-----|-----|----|
| 50  | 55  | 60  |    |
| Val Ser Val Arg Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn |     |     |    |
| 65  | 70  | 75  | 80 |
| Gln Phe Ser Leu Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val |     |     |    |
| 85  | 90  | 95  |    |
| Tyr Tyr Cys Ala Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp |     |     |    |
| 100   | 105 | 110 |    |
| Val Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys |     |     |    |
| 115   | 120 | 125 |    |
| Gly Pro Ile Gly Leu Pro Pro Gly Pro Leu                         |     |     |    |
| 130   | 135 |     |    |

<210> 127  
 <211> 514  
 <212> DNA  
 <213> Homosapien

<400> 127  
 gtcttcattt ctctgttgct ctggatctct ggtgcctacg gggacatcgt gatgaccagg 60  
 tctccagact ccctggctgt gtctctggc gagagggca ccatcaactg caagtccagc 120  
 cagagtgtt tatacaggcc caacaataag aactacatag tttggtagcc gcagaaacca 180  
 gggcagcctc ctaagttgct catttactgg acatctaccc ggaatccgg gttccctgac 240  
 cgattcagtg gcagcgggtc tggAACAGAT ttcactctca ctagcgttag cctgcaggct 300  
 gaagatgtgg cagtttata ctgtcagaa tatttttagtt ctccgtggac gttcggccaa 360  
 gggaccAAAG tggACATCAA acgaactgtg gctgcaccat ctgtcttcat cttccgccta 420  
 tctgtatgac agttgaaatc tggAACTGCC tctgttgtgt gctgctgaa taacttctat 480  
 cccagagagg ccaaagtaca gtggaaagggtg gata 514

<210> 128  
 <211> 171  
 <212> PRT  
 <213> Homosapien

<400> 128  
 Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp Ile  
 1 5 10 15  
 Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu Arg  
 20 25 30  
 Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn  
 35 40 45  
 Asn Lys Asn Tyr Ile Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro  
 50 55 60  
 Lys Leu Leu Ile Tyr Trp Thr Ser Thr Arg Glu Ser Gly Val Pro Asp  
 65 70 75 80  
 Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser  
 85 90 95  
 Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr Phe  
 100 105 110  
 Ser Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Asp Ile Lys Arg  
 115 120 125  
 Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln  
 130 135 140  
 Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr  
 145 150 155 160  
 Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp  
 165 170

<210> 129  
<211> 444  
<212> DNA  
<213> Homosapien

<400> 129  
cagtcgggtc caggactgg caggccctcg cagaccctct cactcacctg tgccatctcc 60  
ggggacagtg tctctagcaa cagtgctgct tggactgga tcaggcagtc cccttcgaga 120  
ggccttgagt ggctggaaag gacatactac aggtccaagt ggtatagtga tcatgcagta 180  
tctgtgagaa gtcgaataac catctaccca gacacatcca agaaccagt ctccctgcag 240  
ctgaactctg tgactccga ggacacggct gtgtattact gtgcaagaga tcggattagt 300  
gggacctatg tcggtatgga cgtctggggc caagggacca cgtcaccgt ctcctcagcc 360  
tccaccaagg gccccatcggt ctccccctg gcccctgc tccaggagca cctccgagag 420  
cacagcggcc ctggctgccc tggc 444

<210> 130  
<211> 148  
<212> PRT  
<213> Homosapien

<400> 130  
Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu Thr  
1 5 10 15  
Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp Asn  
20 25 30  
Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg Thr  
35 40 45  
Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg Ser  
50 55 60  
Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu Gln  
65 70 75 80  
Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala Arg  
85 90 95  
Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln Gly  
100 105 110  
Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe  
115 120 125  
Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly Pro  
130 135 140  
Gly Leu Pro Gly  
145

<210> 131  
<211> 505  
<212> DNA  
<213> Homosapien

<400> 131  
gggctgctaa tgctctggat acctggatcc agtgcagata ttggatgac ccagactcca 60  
ctctctctgt ccgtcacccc tggacagccg gcctccatct cctgttaagtc tagtcagagc 120  
ctccgtata gtatggaaa gacctattt tattggtacc tgccagaagcc aggccagcct 180  
ccacaacacc tgatctatga agttccaaac cggttctctg gactgcccaga taggttcagt 240  
ggcagcgggt ctggacaga tttcacactg aaaatcagcc gggtggaggc tgatgtatgtt 300  
ggggtttatt actgcatgca aactatacac cttccgtca ctttcggcgg agggaccaag 360

gtggagatcc aacgaactgt ggctgcacca tctgtttca tcttccgc 420  
cagttgaaat ctggaaactgc ctctgttg tgcctgctga ataacttcta tcccagagag 480  
gccaaggatc agtggaaagg 505

<210> 132  
<211> 168  
<212> PRT  
<213> Homosapien

<400> 132  
Gly Leu Leu Met Leu Trp Ile Pro Gly Ser Ser Ala Asp Ile Gly Met  
1 5 10 15  
Thr Gln Thr Pro Leu Ser Leu Ser Val Thr Pro Gly Gln Pro Ala Ser  
20 25 30  
Ile Ser Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser Asp Gly Lys Thr  
35 40 45  
Tyr Leu Tyr Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Gln His Leu  
50 55 60  
Ile Tyr Glu Val Ser Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser  
65 70 75 80  
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu  
85 90 95  
Ala Asp Asp Val Gly Val Tyr Tyr Cys Met Gln Thr Ile His Leu Pro  
100 105 110  
Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Gln Arg Thr Val Ala  
115 120 125  
Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu Gln Leu Lys Ser  
130 135 140  
Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe Tyr Pro Arg Glu  
145 150 155 160  
Ala Lys Val Gln Trp Lys Val Asp  
165

<210> 133  
<211> 447  
<212> DNA  
<213> Homosapien

<400> 133  
gagcagtcgg gtccaggact ggtgaagccc tcgcagaccc tctcaactcac ctgtgccatc 60  
tccggggaca gtgtctctag caacagtgtct gcttggaaact ggatcaggca gtccccttcg 120  
agaggccttg agtggctggg aaggacatac tacaggtcca agtggatag tgatcatgca 180  
gtatctgtga gaagtcgaat aaccatctac ccagacacat ccaagaacca gttctccctg 240  
cagctgaact ctgtgactcc cgaggacacg gctgtgtatt actgtgcaag agatcggatt 300  
agtgggaccc atgtcggtat ggacgtctgg gccaaggga ccacggtcac cgtctccctca 360  
gcctccacca agggcccatc ggtttcccc ctggcgcccc tgctccagga gcacctccga 420  
gagcacagcg gccctgggct gcctggc 447

<210> 134  
<211> 149  
<212> PRT  
<213> Homosapien

<400> 134  
Glu Gln Ser Gly Pro Gly Leu Val Lys Pro Ser Gln Thr Leu Ser Leu  
1 5 10 15

Thr Cys Ala Ile Ser Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp  
 20 25 30  
 Asn Trp Ile Arg Gln Ser Pro Ser Arg Gly Leu Glu Trp Leu Gly Arg  
 35 40 45  
 Thr Tyr Tyr Arg Ser Lys Trp Tyr Ser Asp His Ala Val Ser Val Arg  
 50 55 60  
 Ser Arg Ile Thr Ile Tyr Pro Asp Thr Ser Lys Asn Gln Phe Ser Leu  
 65 70 75 80  
 Gln Leu Asn Ser Val Thr Pro Glu Asp Thr Ala Val Tyr Tyr Cys Ala  
 85 90 95  
 Arg Asp Arg Ile Ser Gly Thr Tyr Val Gly Met Asp Val Trp Gly Gln  
 100 105 110  
 Gly Thr Thr Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
 115 120 125  
 Phe Pro Leu Ala Pro Leu Leu Gln Glu His Leu Arg Glu His Ser Gly  
 130 135 140  
 Pro Gly Leu Pro Gly  
 145

<210> 135  
 <211> 520  
 <212> DNA  
 <213> Homosapien

<400> 135  
 caggtcttca tttctctgtt gctctggatc tctgggcct acggggacat cgtgatgacc 60  
 cagtcctccag actccctggc tgggtctctg ggcgagaggg ccgcctcaaa ctgcaagtcc 120  
 agccagactg ttttatacag ctccaacaat aagaactact tggtttggta ccagcagaaa 180  
 ccaggacagc ctcccaagct gctcatttac tgggcatcta cccggaaatc cggggccct 240  
 gaccgattca gtggcagcgg gtctgggaca gatttcaactc tcaccatcaag cagcctgcag 300  
 gctgaagatg tggcagtttta ttactgtcaa caatattata aaagtccgtg gacggtcggc 360  
 caagggacca aggtggaaat caaacgaact gtggctgcac catctgtctt catctcccg 420  
 ccatctgtatg agcagttgaa atctggaaact gcctctgtt tgcgcgtgc gaataacttc 480  
 tatccccagag aggccaaatg acagtggaaag gtggataacg 520

<210> 136  
 <211> 173  
 <212> PRT  
 <213> Homosapien

<400> 136  
 Gln Val Phe Ile Ser Leu Leu Trp Ile Ser Gly Ala Tyr Gly Asp  
 1 5 10 15  
 Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly Glu  
 20 25 30  
 Arg Ala Ala Ile Asn Cys Lys Ser Ser Gln Thr Val Leu Tyr Ser Ser  
 35 40 45  
 Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln Pro  
 50 55 60  
 Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val Pro  
 65 70 75 80  
 Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile  
 85 90 95  
 Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Tyr  
 100 105 110  
 Tyr Lys Ser Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys

|   |     |     |
|---|-----|-----|
| 115   | 120 | 125 |
| Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp Glu |     |     |
| 130   | 135 | 140 |
| Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn Phe |     |     |
| 145   | 150 | 155 |
| Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn             |     |     |
| 165   | 170 |     |

<210> 137  
<211> 490  
<212> DNA  
<213> Homosapien

<400> 137  
caggccagc tggcacatc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 60  
tcctgcagg tttccggata caccctcaact gaattatcca tgcactgggt ggcacaggct 120  
cctggaaaag ggcttgagtg gatgggaggt tttgatcctg aaaaatggta aacaatccac 180  
gcacagaagt tccaggccag agtcatcatg accgaggaca catctacaga cacagcctac 240  
atggagctga gcagcctgag atctgaggac acggccgtgt attactgtgc aacagatcag 300  
ggtggtatata gtggctactt tgactgctgg ggccaggaa cccctggcac cgtctccctca 360  
gcttccacca agggcccatc cgtttcccc ctggccccc gctccaggag cacctccgag 420  
agcacagccg ccctgggctg cctggtaag gactacttcc ccgaaccggg gacgggtgtcg 480  
tggaactcag 490

<210> 138  
<211> 163  
<212> PRT  
<213> Homosapien

<400> 138  
Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Ala  
1 5 10 15  
Ser Val Lys Val Ser Cys Lys Val Ser Gly Tyr Thr Leu Thr Glu Leu  
20 25 30  
Ser Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Gly Phe Asp Pro Glu Asn Gly Glu Thr Ile His Ala Gln Lys Phe  
50 55 60  
Gln Gly Arg Val Ile Met Thr Glu Asp Thr Ser Thr Asp Thr Ala Tyr  
65 70 75 80  
Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Thr Asp Gln Gly Gly Tyr Ser Gly Tyr Phe Asp Cys Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val  
115 120 125  
Phe Pro Leu Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala  
130 135 140  
Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro Val Thr Val Ser  
145 150 155 160  
Trp Asn Ser

<210> 139  
<211> 540

<212> DNA

<213> Homosapien

<400> 139

agaccaggc cttcatttct ctgttgcgtt ggtatctctgg tgcctacggg gacatcgta 60  
tgaccaggc tccagactcc ctggctgtgt ctctggcga gagggccacc atcaactgca 120  
agtccagcca gagtatttta tacagctcca ataataagaa ttattttagtt tggtaccagc 180  
agaaaccagg acagcctcct aagttgcgtca tttactggc atctacccgg gaatccgggg 240  
tccctgaccg attcagtgcc agccggctcg ggacagattt cactctcacc atcagcagcc 300  
tgcaggctga agatgtggca gtttattact gtcagcaata ttatagtagt cctccgacgt 360  
tcggccaagg gaccaagggtg gaaatcaaac gaactgtggc tgccacatct gtcttcatct 420  
tcccgcctac tcatgagcag ttgaaatctg gaactgcctc tgggtgtgc ctgctgaata 480  
acttctatcc cagagaggcc aaagtacagt ggaagggtgga taacgcctc caatccggta 540

<210> 140

<211> 179

<212> PRT

<213> Homosapien

<400> 140

Thr Gln Val Phe Ile Ser Leu Leu Leu Trp Ile Ser Gly Ala Tyr Gly  
1 5 10 15  
Asp Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
20 25 30  
Glu Arg Ala Thr Ile Asn Cys Lys Ser Ser Gln Ser Ile Leu Tyr Ser  
35 40 45  
Ser Asn Asn Lys Asn Tyr Leu Val Trp Tyr Gln Gln Lys Pro Gly Gln  
50 55 60  
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val  
65 70 75 80  
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
85 90 95  
Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
100 105 110  
Tyr Tyr Ser Ser Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile  
115 120 125  
Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser Asp  
130 135 140  
Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn Asn  
145 150 155 160  
Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala Leu  
165 170 175  
Gln Ser Gly

<210> 141

<211> 518

<212> DNA

<213> Homosapien

<400> 141

accatggagt ggacctggag ggctctttc ttgggtggcag cagctacagg caccacgccc 60  
caggccagc tggtagtc tggggctgag gtgaagaagc ctggggcctc agtgaaggc 120  
tcctgcaagg ttccggata caccctact gaattatcca tgcactgggt gcgacaggct 180  
cctggaaaag ggcttgatgt gatgggaggtt tttgatctg aagatggta aacaatctac 240

gcacagaagt tccagggcag agtcaccatg accgaggaca catctacaga cacagcctac 300  
atggagctga gtagcctgag aactgaggac acggccgtgt attactgtac aacggacgat 360  
ttttggagtg gttatgttga ctactggggc cagggAACcc tggtcaccgt ctcctcagcc 420  
tccaccaagg gcccattcggt ctccccctg gcccctgct ccaggagcac ctccgagagc 480  
acagcggcct gggctgcctg gtcaaggact acttcccc 518

<210> 142  
<211> 172  
<212> PRT  
<213> Homosapien

<400> 142

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Thr | Met | Glu | Trp | Thr | Trp | Arg | Val | Leu | Phe | Leu | Val | Ala | Ala | Ala | Thr |
| 1   |     | 5   |     |     |     | 10  |     |     |     |     |     | 15  |     |     |     |
| Gly | Thr | His | Ala | Gln | Val | Gln | Leu | Val | Gln | Ser | Gly | Ala | Glu | Val | Lys |
|     |     |     |     | 20  |     |     |     | 25  |     |     |     | 30  |     |     |     |
| Lys | Pro | Gly | Ala | Ser | Val | Lys | Val | Ser | Cys | Lys | Val | Ser | Gly | Tyr | Thr |
|     | 35  |     |     |     | 40  |     |     |     |     | 45  |     |     |     |     |     |
| Leu | Thr | Glu | Leu | Ser | Met | His | Trp | Val | Arg | Gln | Ala | Pro | Gly | Lys | Gly |
|     | 50  |     |     |     | 55  |     |     | 60  |     |     |     |     |     |     |     |
| Leu | Glu | Trp | Met | Gly | Gly | Phe | Asp | Pro | Glu | Asp | Gly | Glu | Thr | Ile | Tyr |
|     | 65  |     |     | 70  |     |     |     | 75  |     |     |     | 80  |     |     |     |
| Ala | Gln | Lys | Phe | Gln | Gly | Arg | Val | Thr | Met | Thr | Glu | Asp | Thr | Ser | Thr |
|     |     | 85  |     |     |     | 90  |     |     | 95  |     |     |     |     |     |     |
| Asp | Thr | Ala | Tyr | Met | Glu | Leu | Ser | Ser | Leu | Arg | Thr | Glu | Asp | Thr | Ala |
|     |     | 100 |     |     |     | 105 |     |     |     | 110 |     |     |     |     |     |
| Val | Tyr | Tyr | Cys | Thr | Thr | Asp | Asp | Phe | Trp | Ser | Gly | Tyr | Phe | Asp | Tyr |
|     | 115 |     |     |     | 120 |     |     |     | 125 |     |     |     |     |     |     |
| Trp | Gly | Gln | Gly | Thr | Leu | Val | Thr | Val | Ser | Ser | Ala | Ser | Thr | Lys | Gly |
|     | 130 |     |     |     | 135 |     |     | 140 |     |     |     |     |     |     |     |
| Pro | Ser | Val | Phe | Pro | Leu | Ala | Pro | Cys | Ser | Arg | Ser | Thr | Ser | Glu | Ser |
|     | 145 |     |     |     | 150 |     |     |     | 155 |     |     | 160 |     |     |     |
| Thr | Ala | Ala | Trp | Ala | Ala | Trp | Ser | Arg | Thr | Thr | Ser |     |     |     |     |
|     |     |     |     | 165 |     |     | 170 |     |     |     |     |     |     |     |     |

<210> 143  
<211> 519  
<212> DNA  
<213> Homosapien

<400> 143

|            |             |             |            |            |            |     |
|------------|-------------|-------------|------------|------------|------------|-----|
| caggtcttca | tttctctgtt  | gctctggatc  | tctgggcct  | acggggacat | cgtgatgacc | 60  |
| cagtctccag | actccctggc  | tgtgtctctg  | ggcgagaggg | ccaccatcaa | ctgcaagtcc | 120 |
| agccagagtc | ttttatatacg | ctccaaaaat  | aagaactatt | tagttggta  | ccagcagaaa | 180 |
| ccaggacagc | ctccaaagct  | gctcattaaac | tggcatacta | cccggaatc  | cggggccct  | 240 |
| gaccgattca | gtggcagcgg  | gtctgggaca  | gatttcactc | tcaccatca  | cagcctgcag | 300 |
| gctgaagatg | tggcagttt   | ttactgtcag  | caatattata | gttctccgtg | gacggtcggc | 360 |
| caagggacca | aggtggaaat  | caaacgaact  | gtggctgcac | catctgtctt | catctcccg  | 420 |
| ccatctgtat | agcagttgaa  | atctggaaact | gcctctgtt  | tgtgcctgct | gaataacttc | 480 |
| tatcccagag | aggcaaaagta | cagtggaaagg | tggatacgc  |            |            | 519 |

<210> 144  
<211> 173  
<212> PRT  
<213> Homosapien

<400> 144

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Gln | Val | Phe | Ile | Ser | Leu | Leu | Leu | Trp | Ile | Ser | Gly | Ala | Tyr | Gly | Asp |
| 1   |     |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |
| Ile | Val | Met | Thr | Gln | Ser | Pro | Asp | Ser | Leu | Ala | Val | Ser | Leu | Gly | Glu |
|     |     |     |     |     |     | 20  |     |     | 25  |     |     |     |     | 30  |     |
| Arg | Ala | Thr | Ile | Asn | Cys | Lys | Ser | Ser | Gln | Ser | Leu | Leu | Tyr | Ser | Ser |
|     |     |     |     |     |     | 35  |     |     | 40  |     |     |     |     | 45  |     |
| Lys | Asn | Lys | Asn | Tyr | Leu | Val | Trp | Tyr | Gln | Gln | Lys | Pro | Gly | Gln | Pro |
|     |     |     |     |     |     | 50  |     |     | 55  |     |     | 60  |     |     |     |
| Pro | Lys | Leu | Leu | Ile | Asn | Trp | Ala | Ser | Thr | Arg | Glu | Ser | Gly | Val | Pro |
|     |     |     |     |     |     | 65  |     |     | 70  |     |     | 75  |     |     | 80  |
| Asp | Arg | Phe | Ser | Gly | Ser | Gly | Thr | Asp | Phe | Thr | Leu | Thr | Ile |     |     |
|     |     |     |     |     |     | 85  |     |     | 90  |     |     |     |     | 95  |     |
| Ser | Ser | Leu | Gln | Ala | Glu | Asp | Val | Ala | Val | Tyr | Tyr | Cys | Gln | Gln | Tyr |
|     |     |     |     |     |     | 100 |     |     | 105 |     |     |     |     | 110 |     |
| Tyr | Ser | Ser | Pro | Trp | Thr | Phe | Gly | Gln | Gly | Thr | Lys | Val | Glu | Ile | Lys |
|     |     |     |     |     |     | 115 |     |     | 120 |     |     |     |     | 125 |     |
| Arg | Thr | Val | Ala | Ala | Pro | Ser | Val | Phe | Ile | Phe | Pro | Pro | Ser | Asp | Glu |
|     |     |     |     |     |     | 130 |     |     | 135 |     |     | 140 |     |     |     |
| Gln | Leu | Lys | Ser | Gly | Thr | Ala | Ser | Val | Val | Cys | Leu | Leu | Asn | Asn | Phe |
|     |     |     |     |     |     | 145 |     |     | 150 |     |     | 155 |     |     | 160 |
| Tyr | Pro | Arg | Glu | Ala | Lys | Tyr | Ser | Gly | Arg | Trp | Ile | Arg |     |     |     |
|     |     |     |     |     |     | 165 |     |     | 170 |     |     |     |     |     |     |

<210> 145  
<211> 436  
<212> DNA  
<213> Homosapien

<400> 145

|            |            |             |             |            |             |     |
|------------|------------|-------------|-------------|------------|-------------|-----|
| gagcagtcgg | ggggaggcgt | ggtccagcct  | gggaggtccc  | ttagactctc | ctgtgcagcg  | 60  |
| tctggattca | ccttcagtag | ctatggcatg  | cactgggtcc  | gccaggctcc | aggcaagggg  | 120 |
| ctggagtggg | tggcagttat | atggtatgtat | ggaaataata  | aatactatgc | agactccgtg  | 180 |
| aaggcccat  | tcaccatctc | cagagacact  | tccaagaaca  | cgctgtatct | gcaaataaac  | 240 |
| agcctgagag | ccgaggacac | ggctgtgtat  | tactgtgcga  | gagatagcag | ctcgtaactac | 300 |
| tactacggta | tggacgtctg | gggccaaggg  | accacgtca   | ccgtctcctc | agcctccacc  | 360 |
| aaggcccat  | cggctttccc | cctggcgccc  | tgcctccagga | gcacctccga | gagcacagcg  | 420 |
| gcctggct   | gcctgg     |             |             |            |             | 436 |

<210> 146  
<211> 145  
<212> PRT  
<213> Homosapien

<400> 146

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Glu | Gln | Ser | Gly | Gly | Val | Val | Gln | Pro | Gly | Arg | Ser | Leu | Arg | Leu |     |
| 1   |     |     |     |     | 5   |     |     |     | 10  |     |     |     |     | 15  |     |
| Ser | Cys | Ala | Ala | Ser | Gly | Phe | Thr | Phe | Ser | Ser | Tyr | Gly | Met | His | Trp |
|     |     |     |     |     |     | 20  |     |     | 25  |     |     |     |     | 30  |     |
| Val | Arg | Gln | Ala | Pro | Gly | Lys | Gly | Leu | Glu | Trp | Val | Ala | Val | Ile | Trp |
|     |     |     |     |     |     | 35  |     |     | 40  |     |     |     |     | 45  |     |
| Tyr | Asp | Gly | Asn | Asn | Lys | Tyr | Tyr | Ala | Asp | Ser | Val | Lys | Gly | Arg | Phe |
|     |     |     |     |     |     | 50  |     |     | 55  |     |     | 60  |     |     |     |
| Thr | Ile | Ser | Arg | Asp | Thr | Ser | Lys | Asn | Thr | Leu | Tyr | Leu | Gln | Met | Asn |
|     |     |     |     |     |     | 65  |     |     | 70  |     |     | 75  |     |     | 80  |
| Ser | Leu | Arg | Ala | Glu | Asp | Thr | Ala | Val | Tyr | Tyr | Cys | Ala | Arg | Asp | Ser |

|   |     |     |    |
|---|-----|-----|----|
|   | 85  | 90  | 95 |
| Ser Ser Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr |     |     |    |
| 100   | 105 | 110 |    |
| Val Thr Val Ser Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu |     |     |    |
| 115   | 120 | 125 |    |
| Ala Pro Cys Ser Arg Ser Thr Ser Glu Ser Thr Ala Ala Leu Gly Cys |     |     |    |
| 130   | 135 | 140 |    |
| Leu   |     |     |    |
| 145   |     |     |    |

<210> 147  
<211> 428  
<212> DNA  
<213> Homosapien

<400> 147  
gctccgctac ttctcaccct cctcgctcac tgcacaggtt cttggggccaa ttttatgctg 60  
actcagcccc actctgtgtc ggagtctccg gggaaagacgg taaccatctc ctgcacccgc 120  
agcagtggca gcattgcag caactatgtg cagtggttcc agcagcgccc gggcagttcc 180  
cccaccactg taatctatga ggatgaccaa agaccctctg gggtccctga tcggttctgt 240  
ggctccatcg acagctcctc caactctgcc tccctcacca tctctggact gaggactgag 300  
gacgaggctg actactactg tcagtcttat gatagcagca atcatgtggt attcggcgga 360  
gggaccaagc tgaccgtcct aggtcagccc aaggctgccc cctcggtcac tctgtcccg 420  
ccctccctc 428

<210> 148  
<211> 142  
<212> PRT  
<213> Homosapien

<400> 148  
Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly Ser Trp Ala  
1 5 10 15  
Asn Phe Met Leu Thr Gln Pro His Ser Val Ser Glu Ser Pro Gly Lys  
20 25 30  
Thr Val Thr Ile Ser Cys Thr Arg Ser Ser Gly Ser Ile Ala Ser Asn  
35 40 45  
Tyr Val Gln Trp Phe Gln Gln Arg Pro Gly Ser Ser Pro Thr Thr Val  
50 55 60  
Ile Tyr Glu Asp Asp Gln Arg Pro Ser Gly Val Pro Asp Arg Phe Cys  
65 70 75 80  
Gly Ser Ile Asp Ser Ser Ser Asn Ser Ala Ser Leu Thr Ile Ser Gly  
85 90 95  
Leu Arg Thr Glu Asp Glu Ala Asp Tyr Tyr Cys Gln Ser Tyr Asp Ser  
100 105 110  
Ser Asn His Val Val Phe Gly Gly Thr Lys Leu Thr Val Leu Gly  
115 120 125  
Gln Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser  
130 135 140

<210> 149  
<211> 76  
<212> PRT  
<213> Homosapien

<400> 149

Gln Pro Asp Ala Ile Asn Ala Pro Val Thr Cys Cys Tyr Asn Phe Thr  
1 5 10 15  
Asn Arg Lys Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr  
20 25 30  
Ser Ser Lys Cys Pro Lys Glu Ala Val Ile Phe Lys Thr Ile Val Ala  
35 40 45  
Lys Glu Ile Cys Ala Asp Pro Lys Gln Lys Trp Val Gln Asp Ser Met  
50 55 60  
Asp His Leu Asp Lys Gln Thr Gln Thr Pro Lys Thr  
65 70 75

<210> 150

<211> 16

<212> PRT

<213> Homosapien

<400> 150

Ile Ser Val Gln Arg Leu Ala Ser Tyr Arg Arg Ile Thr Ser Ser Lys  
1 5 10 15